

CO-OPERATION IN AGRICULTURE.

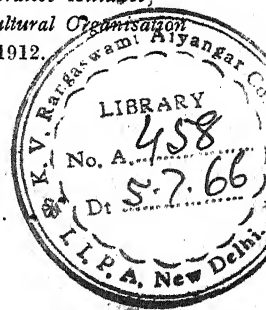
CO-OPERATION IN AGRICULTURE

BY

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*Late Chairman of the International Co-operative Alliance,
and a Member of the Executive of the Agricultural Organisation
Society from its formation till 1912.*

SECOND IMPRESSION.



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I DEDICATE THIS BOOK TO
THE RIGHT HON. SIR HORACE C. PLUNKETT, K.C.V.O.,
WHO,
AS A DEVOTED AND JUDICIOUS
PIONEER OF CO-OPERATION IN AGRICULTURE IN THE
UNITED KINGDOM, . .
HAS CONFERRED A SIGNAL BENEFIT UPON HIS COUNTRY
AND SET A BRILLIANT EXAMPLE,
BY WHICH IT MAY BE HOPED THAT AGRICULTURISTS IN
ENGLAND, SCOTLAND AND WALES
WILL NOT BE SLOW TO PROFIT. .

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PREFACE.

In 1895 the author tried to call attention, in an article entitled "Co-operation in Agriculture," which appeared in the October number of the *Contemporary Review*, to the advantages to be secured by the application of co-operative methods to Agriculture—the introduction and extension of which he has witnessed in more countries than one from their very beginning.

Since that time Co-operation in Agriculture has made great strides indeed abroad. In England its progress has been much less rapid. But with the coming into force of the Small Holdings Act the conviction has been brought home to many that it must be taken up.

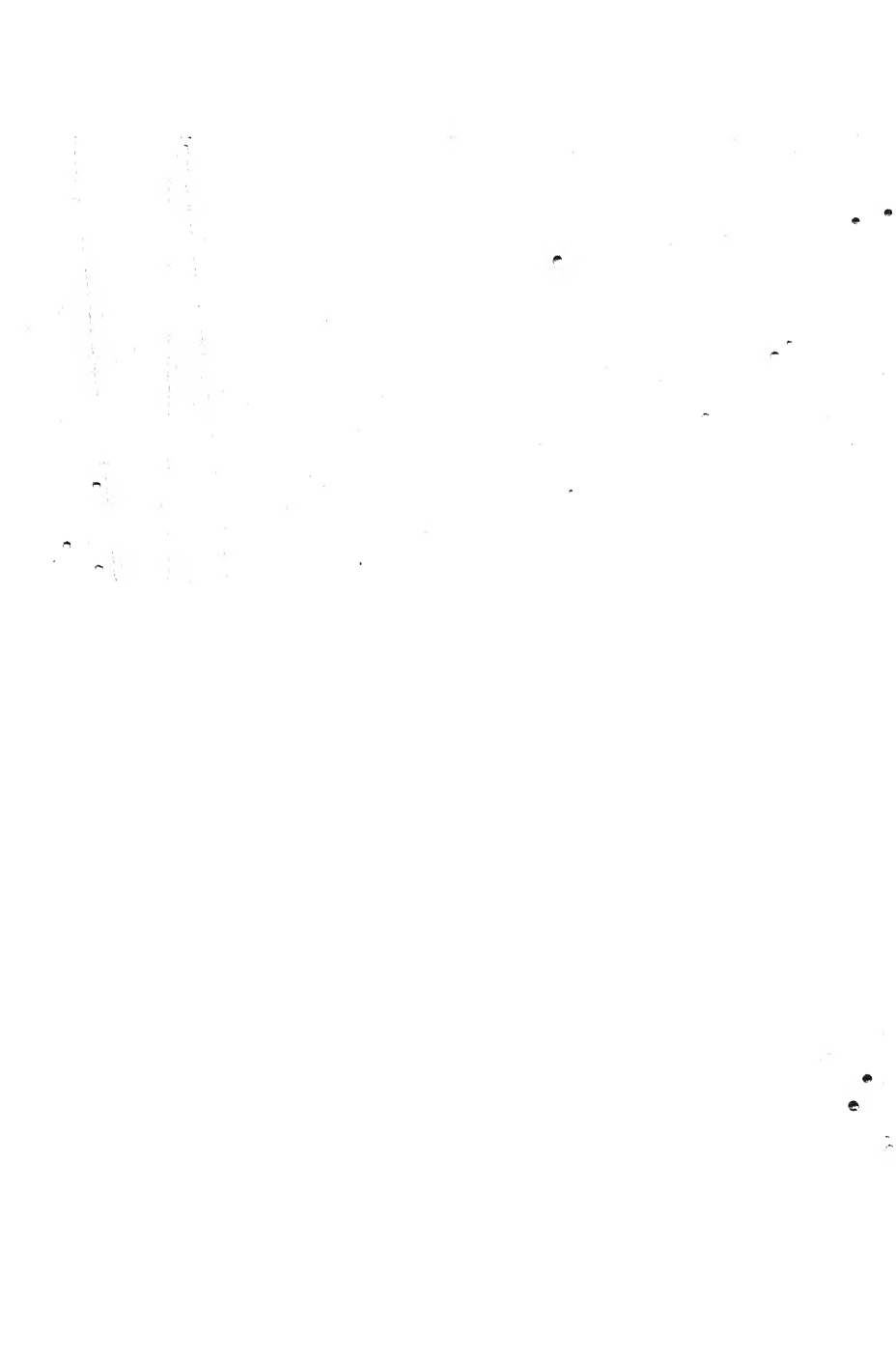
Under such circumstances a book reviewing the various applications given to Co-operation in Agriculture, by the light of the small beginnings that, under the inspiration of the Agricultural Organisation Society (of the Executive Committee of which the author has been a member since the time of its formation) and otherwise, have been made in this country, and of the much wider experience gathered abroad, may appear not out of place.

The present book does not pretend to be an exhaustive Encyclopædia on its subject, or to lay down formulated rules and directions to be followed; much less does it pretend to deal with purely technical questions, of dairying, poultry keeping, and so on. Its object is simply to give a general outline of what has been accomplished, with the addition of such suggestions for the adoption of co-operative methods as occasion may appear to call for.

Having been for a considerable time Chairman of the International Co-operative Alliance, and in constant close contact more particularly with the Unions and Federations of Agricultural Co-operative Societies, abroad and at home, the author, who has been described as "*le coopérateur le plus répandu*," may be thought not to be presuming too much in offering such a conspectus.

H. W. W.

August, 1912.



I.—INTRODUCTION.

Co-operation applied to Agriculture has become a familiar institution and a great economic power almost all over the Continent, to the admitted material benefit of the countries in which it has found a home. Accordingly we now see there not only agriculturists of all grades eager to employ it, but also foreign Governments sparing no pains to remove hindrances out of its way and extend its application. It has been found to put fresh heart into Agriculture where declining and to carry remunerative cultivation into previously neglected parts. In land settlement it has been ascertained to constitute a most valuable, it may be said an indispensable, aid. In consequence, wherever it has gained a footing, new settlements are advisedly set up, no longer in isolation, but in clusters of holdings, in order that the settlers may enjoy the advantages of being able to co-operate for the greatest variety of purposes from the very outset. In Germany and Austria agricultural co-operative societies have become so numerous as almost to jostle one another. In Germany alone there are at the present time more than 26,000 of them, formed for a truly astonishing variety of purposes, ministering to almost every distinct want of Agriculture—buying, selling, providing power, converting produce into more marketable shape, pressing grapes, distilling potatoes, drying roots for longer preservation, storing grain, improving breeds of live stock, insuring farmers' property against almost every variety of risk and, last not least, furnishing plentifully money wherewith to stock and improve farms, buy for cash and launch out

into large and new profitable operations. In Italy agricultural co-operators have advanced so far as successfully and economically to manufacture their own superphosphates, triumphantly breaking up a makers' ring. In Switzerland, on the one hand, Agricultural Co-operation very usefully supplies its members not only with agricultural but also with domestic requisites—to the considerable saving of their pockets; and on the other, through the excellent live stock-improvement societies organised by Herr von Wattenwiél, it enables the small peasantry to dispose of their young beasts as pedigree stock at five times the prices that such used to fetch. What one hears from the United States almost takes away one's breath by its truly American bigness,—if one could only rely upon its being truly “co-operative.” More than half the United States' Agriculture, as represented in all by about 6,100,000 acres, is reported to be more or less governed by Co-operation.~ The Farmers' Educational and Co-operative Union alone, a comparatively new organisation, with, as is claimed, about two millions of members, possesses—according to a public statement made by its President in May, 1911—1628 warehouses mainly for storing cotton, an unspecified large number of elevators and terminal agencies for the handling of grain, 245 packing houses, dozens of newspapers, coal mines, several banks, flourmills, creameries, pickle factories, several hundred stores, an implement factory, a superphosphate plant, a phosphate mine, tobacco factories and warehouses, produce exchanges, fertiliser factories, peanut warehouses, a peanut reclar, many cotton grading schools, co-operative life and fire insurance companies. Unfortunately one cannot tell to what extent this enormous array of establishments accords with our canons of Co-operation. France professes to possess over 38,000 agricultural co-operative societies, all of which, it is true,

cannot rank as fully "co-operative" in our sense, but all of which have their recognised utility. In any case Co-operation effectively covers the ground, and those who have recourse to it are the better for it.

• • That is, indeed, the result to be observed throughout. The rural portion of the countries affected by Agricultural Co-operation has been transformed and raised to higher productive efficiency. The agricultural classes and the entire country have grown the richer. And the men practising such co-operation have been transmuted as well. There is remarkable educating power in Co-operation, which makes men think, calculate, study, and which trains them for business. It quickens the march of civilisation, while hastening the growth of population. It sharpens wits and awakens intelligence. We notice the result already in India, where Co-operation has struck root only within the last few years. Those who practise it already cry out for more education, more technical instruction, better seeds, better implements, better fertilisers, better methods of husbandry. We notice it to a very much larger extent in European countries. What is the Agriculture of Germany to-day, with its "intensive" culture, its remunerative "industrial" crops, its perfected rotations, its variety of applications? Fifty years ago German Agriculture lagged miles behind our own. The burden of the two Stöckhardts' and of Hartstein's teaching was: Do like the English and the Scotch! Now, barring live stock breeding—in which we still excel—German Agriculture is undoubtedly ahead of ours. Our own once envied Agriculture has remained, like the stump of King Nebuchadnezzar's dream tree, with its glory gone—though there is life and vigour still within it, which may, if we will only do as our whilom pupils have done, bring it back to its first pre-eminence. But for the moment German Agriculture leads. There

is more variety in 't than in ours, more adaptation to varying circumstances; more thought for the production of money and for the cultivation of the *ager*. It is Co-operation which has brought about this remarkable change—making men think, placing the use of business skill and technical knowledge within the reach of the humblest among them, providing stimulating contact—which has acted, in King Solomon's words, like "steel upon steel"—and creating opportunities for turning all such advantages to account.

And what, so it may be asked, was it that led one abroad to such useful form of combination? In the first instance it was necessity, such as in Alfred de Musset's words, drove our ancestors to "bow to the sanctifying baptism with the dew of labour (*le saint baptême de la sueur*)" and made our first parents delve the ground. Delving by itself had become unprofitable. The "three livings" which thirty-seven years ago Lord Beaconsfield still thought that he could detect emerging automatically from Mother Earth, refused any longer to spring up. Even the one living that might be considered to have been left became grudging and chary. There was no help for it but to economise outlay by joining forces together and acting in that union which according to the Belgian national motto "creates power." It was not a question between large farmers and small. In his competition with an overmastering world even the largest farmer saw his power dwindling to insignificance, and, to be able to meet his rivals, he discovered that he must arm himself more effectively and rely upon co-operation with others. For the small farmer the matter presented itself as a question of economic life and death. Government favours, inalienable "homestead" farms, cheap railway rates—all proved of no avail without Co-operation. So the seed came to be planted. And its own utility developed.

the tiny shoot into a great tree, in whose ample shade, as in Nebuchadnezzar's dream, all animate creation may find a grateful refuge.

We in England have remained strangely backward in this matter—to our loss. “Strangely” one may well say, in view not only of the mass of foreign evidence accumulating during forty or fifty years, as if for our special benefit, telling only one tale; but also of the truly magnificent success of industrial Co-operation, in which, as erst in Agriculture, we lead the world by a long way. The figures recording such success appear to foreigners almost incredible. Surely to our eyes they ought to have demonstrated the remarkable potency of the principle of Co-operation! Our millions of men—mostly working men—building up out of their few shillings originally saved from labour, by their mere circumscribed custom, institutions which rank as the largest traders in the kingdom, cheapening goods, improving their quality, making trade honest so far as their power reaches, and greatly raising the educational, intellectual and business status of their class—all this should have taught us a lesson which, so one would have thought, our agricultural classes, always complaining of hard times, would have been quick to take to heart. Nothing of the kind! We have gone on precisely in the same old humdrum way—complaining, like the Jews at the Red Sea, when our duty was to “go forward,” but not seeking to remedy what was amiss. It looked as if farmers thought that there was something derogatory and degrading in Co-operation. Or else they dreaded “Socialism,” of which Co-operation is in truth the antipodes. Gregariousness and readiness to act in concert have indeed never been a leading feature in the character of our rural population. And in justice be it said, it has taken even those whom we now look up to as our models in the matter long enough to buckle to Co-

operation. In all countries farmers are difficult to move. Belgian and Italian ministers have long openly bewailed the distrust for co-operative practices which was clearly observable among their peasantry. It has taken a long time even to rouse German farmers, now the largest agricultural co-operators in the world—for the quality of United States Co-operation is questionable—to an appreciation of the new method. In France, chosen home that it is of bureaucracy and of doles, it has needed much Government prodding and many Government benefactions to produce an Agricultural Co-operative Movement. The very Danes, who are set up as models in the matter for all the world, have—so M. Andreas Nielsen shows in an official Report prepared for the International Congress of Brussels in 1910*—taken to Co-operation only because they felt that they *must*, and in the precise degree in which necessity compelled them. Step by step they have advanced, not in any case from a conception of conjectural advantage to be gained, but only as necessity urged them. Dairying first, in the place of corn growing, pig rearing, slaughtering, bacon curing, egg raising—every new departure was forced upon them by a Doomedean necessity, by reason of some obstacle obstructing the course of accustomed business. The national humiliation of 1864 supplied the first impulse. It is remarkable how instinctively nations, of whatever race, turn to Agricultural Co-operation in similar distress. The Gothic Danes, the Turanian Finns, the Slav Poles—all have under humiliation or oppression sought, and found, relief in Agricultural Co-operation. The Danes rightly thought first of their education and that patriotic drawing together in a spirit of brotherhood for the national good which led one of their authorities in the renowned “High Schools”

* “La Coopération dans l'Agriculture en Danemark.” Published by the Royal Statistical Department at Copenhagen.

to refuse a brilliant appointment in one of our Colonies to teach his lesson there. "It could not do my own country any good, and it might conceivably raise up competition to it." Under the guidance of Bishop Grundtvig, Schröder, Dr. Növbregard, Jestrup and Fjød, the Danes organised their "High Schools," which do not teach "words," as Lord Beaconsfield made his early hero, Contarini Fleming, say with contempt, but form character and lay the foundation for wider knowledge—establishments which were soon to be followed up by agricultural technical colleges. The first Co-operative Store was formed at Thisted, in 1866. But Agricultural Co-operation, now the distinctive glory of Danish Co-operation, did not follow until 1882, after Germany, turned suddenly protectionist under Bismarck's new policy of 1879, had refused to Danish corn admission to its accustomed market. Thus under necessity Denmark became from a corn-growing a cattle—later also, on similar provocation, a pig and poultry—raising country. And the necessity of disposing, first of its butter, then of its bacon and last of its eggs, drove it perforce into the arms of Co-operation.

It is—so it may be interesting to notice by the way—such piecemeal taking up of Co-operation—just so much as circumstances called for at the moment—which has impressed upon Danish Agricultural Co-operation its own quite peculiar stamp, the dividing up of the work into so many self-contained departments—the sale of eggs, the purchase of farming requisites, bacon curing, dairying and so on—that it is not unusual to find one small peasant a member of nine or ten different societies, to discharge for him so many distinct functions: There is some advantage in this, no doubt. But it suits only few cases. It requires, among other things, a highly educated membership to man all the committees. It is likely to mean the forgoing of the use of "power"—where such is em-

ployed—and of opportunities. Raiffeisen, beginning at the opposite end of the problem, having an impoverished peasantry to deal with, only sparingly equipped with business knowledge, and planning Co-operation under a much wider aspect, of necessity proceeded on reversed lines:—he would form *one* society only in every village, to satisfy *all* the requirements of the population: credit, common purchase, common sale, common conversion of produce into more marketable shape, and whatever other service the prospect of further advantage might suggest, leading rather than following necessity, going in advance of compelling need, and meeting it half way. Under conditions different from those that Raiffeisen had to deal with, such blending of everything may no doubt be open to objection. But within the limits of those conditions—and ~~that~~ appears to be in the main our case—his system has proved every bit as successful as the Danish. And even where all such conditions are not satisfied it must be obvious that a combination of services is likely to prove advantageous. The society which buys may also sell. The “power” which moves the dairy machinery by day may well light up the village by night. The cart which fetches milk or carries butter may also bring home goods.

By the adoption of these different views it has come about that there are distinct varieties of Agricultural Co-operation, among which new practitioners will have to choose. We have lately given all our attention to Co-operation as practised in Denmark. But it will be well if, instead of studying the system of one particular country only, however successful it may have proved in its own circumstances, and then blindly following it, we accept the apostolic precept of “proving all things and holding fast that which is good.” There are other systems which are likely to suit our own case at least equally well. And we may in this country secure the very same ad-

vantages which in Denmark division into a number of distinct organisations ensures by the distribution of business to be transacted in one society among a number of committees, whose members will soon become to the requisite degree experts in their own particular branch. This seems more in keeping with our national idiosyncrasies than separation.

It is not without interest to pursue the onward march of Agricultural Co-operation across Europe.

Grafting Danish example upon the system of Co-operation which Schulze (being a faithful pupil of Rochdale) and Raiffeisen had taught them, the Germans soon took a decided lead. Beginning modestly with some struggling supply societies formed by Herr Haas in his native grandduchy of Hesse, their Co-operation soon spread out—all the more that Governments, rather free-handedly than judiciously, stimulated the propaganda. The consequence is that, though there has been magnificent growth, all within is not as one would desire to see it. However, Governments lent assistance also where they might legitimately be expected to do so, that is, by education; and once more it is the schoolmaster who has helped to win the agricultural "Sadowa." And from "Knowledge" has sprung "Power" in the shape of a magnificent co-operative movement.

In France it was the "Agricultural Syndicates"—an unlooked for product of what was really intended as a Trade Union law of 1884—which, though not themselves co-operative societies in the fullest sense of the word, have contributed most largely to the extension of practical Co-operation. France would not be France if the State had not claimed to put its own gilded finger into the pie—lavishing "subventions," but at the same time also rendering excellent services in other ways—as, for instance, by the appointment of its most meritorious "depart-

mental professors," who teach and practically point the way with admirable effect. Under the propulsion of such stimulating influences a mighty host of co-operative organisations has grown up, which is variously estimated at from 20,000 to 38,000, according to what you choose to include. For the co-operative element is not everywhere equally predominant.

Switzerland, having begun in its own local way by the time honoured *fruttières* or "cheeseries," and later by live stock improvement societies, in the nineties developed Agricultural Co-operation on its own modernised lines, carrying it in remarkably short time to great power and extensiveness by combining distribution of household requisites with purely agricultural supply. In Eastern Switzerland the combination of these two services has proved a remarkable help to the spread and intensification of Co-operation, as those can tell who have witnessed the humble beginnings of the Eastern Swiss Society—now housed in a palatial building—in that little shed near the railway station at Winterthur.

Italy ambitiously claims to have been in the field before either France or Germany, there being the formation of a co-operative society for the common purchase of silkworms on record in Friul as early as in 1855. There was not, however, an organised movement until much later. In Italy it is more specifically the public-spirited great Savings Banks, not harnessed to a Treasury chariot, like ours, which, turning the profits earned in their full freedom to account, have acted as fruitful generators of Co-operation by means of the *cattedre ambulanti* and otherwise. That surely has done more good to the nation than our studied "appreciation" of Consols locked up in the Old Jewry. Even in the eighties co-operative societies sprang up only sporadically, and by 1892 there were only eighteen specifically agricultural societies ready

to join the *Federazione* of Piacenza, which has since grown powerful and shown itself full of resource. It was only later that the State interfered with gifts, which, generally speaking, fail to produce the desired effect. However, the prevailing Socialist wave swaying the rural population has served to introduce a distinctively democratic spirit, emphasising the point that this is a movement, in the first instance, for the *small* farmers, and ripening sooner than elsewhere, on something like a perceptible scale, the seed of co-operative service for the purpose of land settlement. The Italian *affittanze* are the pioneers of modern co-operative land-renting as practised in our Co-operative Allotment Societies.

• • • Thus the impetus originally given, in its modern form, in Denmark, has kept extending in all directions. Austria stepped in with State aid, more ample in proportion to its size—as one of its departmental officers has openly boasted—than in any other country. It now numbers about 11,500 purely agricultural co-operative societies. Hungary has proceeded, with telling effect, upon similar lines, and now boasts about 5,000 societies of the kind indicated. Servia, Bulgaria, and Roumania followed suit. Servia has now about 1,000 societies, Bulgaria—having begun only about ten years ago—700, Roumania boasts over 3,000. The Netherlands developed more particularly a highly perfected form of Dairy Co-operation well deserving of our study. The total number of their agricultural co-operative societies of every sort now stands at more than 3,000. In Belgium the sustained efforts of the *Boerenbond* have produced a promising movement. There it is that, at Herzele, people have found out that Co-operation has benefited them to the extent of £3 18s. an acre. The total number of its agricultural co-operative societies is now given as close upon 4,000. Little Luxembourg with scarcely a large town's population,

has about 600 such societies to show—very much coddled by the State. Even Spain and Portugal have already some firstling results to present. Spain has about 1,160 societies. Then there is Sweden with some 3,000 societies, Norway with 700 dairies alone, and Russia—excluding a large number of societies improperly called “co-operative”—according to Professor Anziferoff, with about 7,500—not counting Finland, which by itself possesses about 2,000. Thus the best part of the Continent has come to be overspread with Agricultural Co-operation, holding up to ourselves the light of stimulating example.

It would be but lost labour to reckon up here the full force to which Co-operation in Agriculture has grown, and the value of the precious gifts which it has conferred on husbandry, simply because every month sees the roll of societies lengthened, the number of their members and the volume of their resources and operations increased. The reckoning would be out of date almost, before the sheets on which it has to be printed could be dry. Agricultural co-operative societies number by thousands, in Germany by tens of thousands; and Agricultural Co-operation has become a power to be seriously reckoned with in the markets of the countries in which it has struck root, a powerful reserve force in emergencies, to uphold the tillers of the soil, a steady pillar in ordinary times, dreaded and opposed in some commercial quarters, but generally appreciated.

If we in Great Britain have long hung back in the adoption of Agricultural Co-operation, time has at length stepped in to vindicate its claims. With “750,000 small holders and allotment holders” in the field we can hang back no longer. Large farmers may scrape along as they think best, but observation and experience tell us that, without the assistance of Co-operation our pet project of social reform in rural districts must prove a failure. We

have had our own little beginnings in Co-operation in Agriculture, so it is true, on very humdrum lines—indeed, before our neighbours, now so much ahead of us in the matter, turned their thoughts to it.

Forty years ago we had nine or ten co-operative county societies—some of which still survive—formed to supply their members with cheaper and better super-phosphates. And in their small way thousands of small farmers had also joined together in unregistered societies to provide for the same want. There is no occasion here to recall Ralahine, Orbiston, Radbourne, the early Assingtons, and so on, any more than there is to talk of the extinct or decaying institutions of *communaux*, *communes*, *watagas*, *droujinas*, *zadrugas*. Those were attempts at realising communistic dreams. In substance such unpractical collectivism has been abandoned—at any rate on this side of the Atlantic—as economically unsound and not enduringly practicable. And even among Roumanian *obstei* and Italian *affittanze*—representing co-operative hiring of land, as distinguished from collective ownership—independent cultivation of separate holdings now decidedly predominates over collective. But if we had gone on developing our agricultural co-operative supply, we might by this time have arrived at something worth possessing for agriculture. Although common purchase is not by any means *everything* in Co-operation, certainly it stands for a great deal. Unfortunately, the efforts then ventured upon do not appear to have been continued. The reason possibly is the same which made my own endeavour in 1883 to form a farmers' co-operative supply society in East Sussex fail, although everyone present, at a very representative and well-attended gathering of landlords and tenants, assented to the principle. The farmers assenting were—so it turned out—on their dealers' books and accordingly not free agents. The

lesson to be gathered from this is that which Sir Horace Plunkett has rightly drawn in Ireland, when he said that if he had his work of organisation to do over again, it is with Co-operative Credit that he would begin. The power to command money was what was wanted, and that led me to devote myself more specifically to the cause of Co-operative Credit.

A brighter day dawned, for Ireland, when Sir Horace Plunkett there took up the cause of Agricultural Co-operation in 1894. Unlike our English "organisers" he did not despise foreign example. He was not ashamed—nay, he showed himself eager—to learn from the Danes, and later from the Dutch. Those practical examples are the models upon which—with judicious adaptations, such as there must be—Irish Agricultural Co-operation has been generally moulded. And practically applied, it has proved a godsend to Ireland, a success to which, on witnessing its results, our late Sovereign has paid ready testimony.

The Irish Agricultural Organisation Society, formed and ably led by Sir Horace Plunkett—who has with rare tact managed to unite in it all distinct elements, political, social and religious, of his country, except the gombeen-men in money or goods—can to-day make it its boast that in its poor country it has organised close upon a thousand co-operative societies, for the benefit of Irish Agriculture, with about 95,000 members, almost exclusively practical farmers, and doing an annual trade of nearly £3,000,000—of which nearly £2,000,000 is in co-operatively-made butter—telling up in the past to about £25,000,000 in all. Every one connected with that co-operative practice is the better for it, as there is no lack of willing evidence to show. And, surely, the country as a whole is a gainer—let alone that what is after all only a beginning contains a promise of rich benefit for the future, the secret of success having been discovered. Thus to the quick-

witted Irishmen Competition, like Achilles' spear, has brought with it a ready cure for the very wounds that it had first struck by letting loose co-operative butter, eggs and bacon, cheaper in price and better in quality than our own, seemingly without limits, upon our coasts. The Irish have learnt how to fight the aggressor with his own weapons. And if the Department of Agriculture—which, as a public authority, cannot possibly “co-operate”—will but take Talleyrand's advice and abstain from *trop de zèle* and leave Co-operation alone without handicapping it with its irritating interference, the Irish Agricultural Organisation Society may be trusted, by means of Agricultural Co-operation, to raise its country to great prosperity. There is every promise of this.

With such examples to urge us on our way one may hope that we, too, on this side of St. George's Channel, shall before long take our place otherwise than experimentally, in the phalanx of countries practising Co-operation in Agriculture on something like a national scale and, beckoning us on by results which may be briefly summed up in the words of the Principal of one of Belgium's dairy schools, spoken with regard to her own country :—“What striking contrast, when one compares the progress realised where agricultural societies flourish. The yield of fields has considerably increased : live stock breeding, sales for the meat market, and sales of draught horses now figure in foremost rank ; they have raised farms already abandoned once more to prosperity and brought back to the hearths of the countrymen the comforts which had disappeared.” What a promise for our deserted countryside which we are now hoping to repeople with “a bold peasantry, their country's pride.”

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II.—GENERAL PRINCIPLES.

Opinions upon what Co-operation may accomplish in Agriculture, what should be its guiding principles, and what are its limits, do not appear in this country to be quite as much in unison and quite as clear as might be desired, if there is to be concerted action widely supported, such as alone can ensure complete success.

There are people who look to Co-operation for very much more than it can possibly yield. On the other hand there are people who in ignorance unduly belittle its power. On the whole, however, Co-operation—which was once ranked as an alias of Socialism—is now generally believed in. But just as in industrial Co-operation the late G. J. Holyoake found reason to complain that there were “thousands of members of co-operative societies to one genuine co-operator,” so it may to-day be avowed that, in respect to Co-operation applied to Agriculture, there are infinitely more advocates and avowed partisans of Co-operation than there are persons acquainted with its principles. On no ground is there more counterfeit Co-operation to be met with than on Agricultural.

“There is considerable confusion in this country, not merely in the minds of the general public, but in the trained minds of university professors,” so wrote to me not long ago a high authority in the United States Department of Agriculture, “as to what economic co-operation is. What is the definition that will place *this* organisation in the class of those that are engaged in economic co-operation and will place *that* organisation outside? You will confer a favour upon this Department if you will

communicate your formula which will establish a test for including and excluding as associations co-operative or not."

Ah, that is the difficulty! It is not at all a question of formula. We have had mechanical rules laid down in plenty. "Combination of persons, not of capitals"—therefore "one man one vote" as an immutable rule. "No dividend upon share capital beyond the accepted market rate for money." "Unlimited membership"—the society steadily kept open to newcomers, to prevent its degenerating into a ring, like the French *luneliers*. All these are capital rules. But they apply only to externals. There is a kernel beneath, which is not governed by positive precepts, but which on the contrary ought to govern them. The rules quoted do not bar out abuses—grave abuses, such as unfortunately in only too many co-operative organisations we have seen creep in. These rules do not shut out that bane of British industrial Co-operation, "dividend hunger." They do not close the door against John Bunyan's dangerous friend "Mr. By-ends," who is in Co-operation at the present time more rampant and more mischievous than ever—in part because, as M. Lazzatti once said of his banks, "we have succeeded too well." They do not pronounce an effective ban upon that corrupting "patronage" Co-operation—which insists upon the form of Co-operation, but couples it with the worst practice of oligarchy; upon "Deinagogue Co-operation," which uses Co-operation as a tool for politics; upon "Cupboard Co-operation," which makes Co-operation a pretext for the receipt of doles out of the taxpayers' pocket; upon "Denominational Co-operation," which moves societies like pawns in the game for the reconquest of ecclesiastical power. These things are crying evils in the present day. We cannot, as the present Postmaster

General once remarked to the co-operative enthusiast Dr. Solly. "put co-operative spirit into the rules." But it should be in the society.

Even such abuses apart as those here enumerated, people appear very little clear in their minds as to what practical Co-operation should be based upon, what it can attempt, what it should avoid, what decalogue should govern it in the matter of practice.

Under such circumstances it appears that a few pages may well be devoted to a brief consideration of the conditions which either invite or else repel Co-operation; of the principles upon which it ought to be built up; and of the limits existing to its fruitful action. For limits undoubtedly there are. Co-operation is not by any means the unfailing "accomplish-all" and "cure-all" for which fertile brains have sometimes been pleased to give it out, but a simple economic instrument, exceedingly useful in appropriate circumstances, for a great variety of purposes, but on the other hand wholly ineffective under other conditions. Co-operation has no magic in it. It is just a simple junction of forces among a number of persons more or less similarly situated, and having a common object in view, for attaining that object. Its aim is not directly to make individuals rich. It enables them to make themselves so by removing obstacles and creating facilities for individual effort. That is, economically speaking, the limit of its utility. It cannot create wealth out of nothing. Wherever two shoulders placed against a wheel can make that wheel move faster, or further, or more smoothly than each shoulder pushing by itself, wherever ten sovereigns laid out in common will purchase more than the same ten gold pieces expended separately, it may be relied upon to vindicate its efficacy. Beyond this it will, as already shown, stimulate intellect, detect new openings for successful enter-

prise, and teach the value of mutual consideration and mutual help. But it will not serve purely selfish or gain-seeking ends. It offers a means for profitably uniting forces for the avoidance of unnecessary expense, for the obtainment of better value for produce, for the withstanding of persecution and oppression. It will break up rings, cheapen purchases, facilitate sales, create and steady markets, render practicable work of sundry kinds, which is not otherwise possible for individuals. Within certain limits it may do away with the middleman and abolish the unnecessary toll levied by him upon commodities on their passage to the consumer. It cannot exploit others. It is not "business," but common work. It aims not at profit, but at rendering a common service.

• Wherever more is aimed at, wherever speculative gain is kept in view, or mastery over others is aimed at, in the place of attainment of equality, or else where there is essential inequality among those who propose to practise it, it is out of place. Instances of such kind will be quoted.

Now, in the pursuit of Agriculture, happily, there is a wide field open in which conditions favourable to the employment of Co-operation predominate, and in which, consequently, rightly applied, Co-operation may be expected to do great good. However, of course, the successful rearing of the fabric presupposes more than the mere existence of a favourable building ground. *Il ne suffit pas*, so Léon Say has laid it down, *d'avoir une bonne machine ; il faut aussi avoir un bon mécanicien*. There must be a sound plan and good workmanship as well.

The caveat recorded against the study of "profit" should not be misunderstood.

Co-operation professes very lofty aims. It is to extend education, raise moral tone, create a bond of identical interests uniting men with men. But Co-operation

with all its higher aspirations can never be expected to appeal for active support unless it offers some distinct and direct material benefit. It is distinctly the prospect of such which has secured its remarkable success among what unquestionably is to-day, agriculturally speaking, the most co-operative nation in Europe, that is, the Danish, and the plea raised in its favour in the United Kingdom unmistakably is that it will, rightly applied, improve the material condition of those husbandmen who may agree to practise it.

Being intended to produce material benefit, it follows as a matter of course that Co-operation must begin by being thoroughly businesslike. Should it become otherwise, its benefits are likely to prove illusory, and will certainly be dealt out with an unequal hand, wringing one while bringing unmerited gain to another. And businesslike management is absolutely indispensable for that self-reliant independence which must be the goal of all sound Co-operation. Co-operation must be able to stand by itself, not lead an epiphyte, much less a parasite existence. Once it becomes divorced from unadulterated self-help it ceases to be Co-operation.

Now, the observance of businesslike management should not, in Co-operation, present any insuperable difficulties. For, in the first place, unlike other business, Co-operation begins with an assured market, or else an assured workshop for the material required. And in the second, the calls upon its business managers are in any case likely to be proportioned only to the ability which these men possess. Herr Abt, in his interesting history of Agricultural Co-operation in Switzerland, distinctly attributes the striking success of his own Union, that of Eastern Switzerland, to the fact that all its managers are and all along have been simple "peasants"—some of them large peasants, but still all specifically representative members

of the "peasant" class. A large society, with manifold transactions and substantial interests at stake, may require practised commercial capacity. But it will also be in a position to command such. The small local society, which we have most prominently to keep in view, will not demand more business skill than the native motherwit and intelligence of the ablest among its small farmer members can supply. The transactions are likely to be limited in substance as well as in kind. The market is there. The important point is that there should be local men to judge of local wants.

No doubt a society so situated as is here supposed will do well to enrol itself for mutual assistance and support in such union or federation as will have to be recommended on other grounds besides. One of the peculiar advantages which Co-operation offers to small men, and which ought to be well taken into account, is this, that it places skilled advice and skilled service at their disposal at exceedingly moderate cost, thus raising them in this matter completely to a level with their wealthier neighbours, who have thus far enjoyed a monopoly of the ancillary learning, skill and experience, which nowadays enter so largely into the pursuit of Agriculture. Agriculture, by itself is still only an ordinary craft, but, if it is to be practised with success, it is dependent upon the aid of several of the most recondite sciences, as well as upon thoroughly commercial management. The old-fashioned, simple methods and easy calculations will no longer suffice. The farmer of to-day wants to be, in person or by substitute, a skilled trader. There must be a knowledge of trading principles, of markets, a power of scientific calculation, of chemical analysis and botanical examination, such as an ordinary small farmer can neither be expected to possess nor can afford to purchase for himself. Co-operation here comes to his rescue. It provides for

him the persons who can by their knowledge and expertness do for him what he cannot do for himself. Purchasing—together with others—in large quantities, the single man may make a better bargain, in this as well as in other respects that he purchases—even his small individual lot—subject to scientific examination and under the most favourable conditions as regards knowledge of markets and familiarity with the article purchased. The skilled trader, employed by his society—towards whose salary he contributes a mere trifle—knows precisely in what shape he will at the time most economically acquire the particular fertilising or feeding constituent which the farmer's field or his beasts stand in need of; and also which form of it will best suit his specific case. The distinct success which our co-operating farmers in the Eastern Counties have secured in the sale of live stock, is in great part attributable to their employment of experts who know every market within reach of their district, and can accordingly in every instance select the most favourable one for the particular beast to be sold. In the same way a co-operative society or union may avail itself, for the benefit of its members, of the services of experts of eggs, butter, bacon, fruit, grain, machinery, —everything, in fact, which enters into farming practice.

The conditions constituting businesslike management in a co-operative society it is not difficult to specify. One is that it should be made a fundamental and indispensable rule that no risk whatever should be incurred, no speculation entered upon, but that all business taken up should be kept perfectly safe. That follows from the principle already laid down that Co-operation studies, not selfish gain, but common service.

Co-operation and risk or speculation absolutely exclude one another. Risk and speculation, under temptation which seemed to promise certain gain, have led more than

One society intending to be co-operative, even great unions, into serious loss and even destruction. There should be absolutely nothing undertaken that involves risk.

The most effective safeguard to ensure this will be the enforcement, as a reality, of strict responsibility, coupled with that "maximum of publicity" which Sir Robert Morier so strongly insists upon. It is for this purpose that so many foreign co-operative societies prefer unlimited liability to limited. Involving the possibility of greater loss, unlimited liability effectively sharpens vigilance and a disposition to be critical. Except in one particular form of Co-operation, which can absolutely not do without it—but in which it becomes wholly freed from all its terrors—that form of liability is out of the question in this country, as being unacceptable to our people. And it is not needed. But a lively interest among members in the affairs of the society, which naturally produces the requisite oversight of officers, there should be. It is one of the advantages of Co-operation, as compared with Joint Stock management, that it directly encourages this and makes it easy. The Board of a Joint Stock Company may lead its shareholders into mischief and even ruin, without their being able to prevent it. In a Co-operative society, where every member has an equal vote, it is wholly otherwise. Every member also has an equal say, if he chooses, and has at all times means open to him for ascertaining what has been or is being done, and for taking the opinion of his fellow members upon it. The officers should be selected for their fitness. There should be no "respect of persons" in the sense of "the Squire and his relations." There must be equality. The more wealthy and better educated are for such very reason likely also to be highly useful; but if they are leaders they should be leaders on that ground and not because of their social or financial position. In this

country the question of remuneration for such officers is not likely to cause any heartburning, as it has done in some places abroad. Remuneration there should be none. Skilled and expert service will want to be paid. And it is well worth it. It will in fact be all the better for being paid. But persons who simply undertake the management on one or other of the governing bodies ought to be content with acting for the satisfaction of rendering a service to all.

It is a mistake to overload the governing bodies either with men or with prescribed formal duties. There may be difficulty from the outset in manning those bodies. Competent men are not everywhere forthcoming in great abundance. We read of societies—petty little village societies—which are made to appoint three Trustees when often enough they have difficulty in finding one; and for whose Committee a long catalogue of formal business is prescribed as a necessity. That is a great mistake. The proper safeguard lies not in such rigid forms, which are mere "leather and prunella," but in the liability to be called to account. The hands of a committee should not be unnecessarily tied. Prompt action may be called for. Careful account keeping there will have to be. But the simpler and more intelligible to the untutored rustic mind it is, the better will the society fare. Special branches of business require special book-keeping. But that comes under the head of "skilled" labour. In the hands of the Committee it ought to be reduced to simplicity for the use of members. And a record of all business done should be accessible to members.

Much has been said lately about an "audit" which, for supposed safety, people desire to make "official." A sound audit of course there will have to be. Indeed in co-operative societies we go in some respects beyond a mere actuarial audit and carry inquiry into the character

of the business transacted. But making the audit "official"—that is, bound to be carried out by officers of the State—so far from constituting an additional safeguard, goes far towards making the check illusory. "Inspection by State auditors," so remarked M. Luzzatti some years ago, with a little pardonable exaggeration, "is worse than no inspection at all." It stands to reason. The State auditor has no interest in the society. He has just to go through his audit as an *opus operatum*. His inspection, to give the thing a more comprehensive name, is only too likely to degenerate into a perfunctory form or else into an arbitrary exercise of caprice. We have had instances of this abroad. Besides, auditing a co-operative society's accounts is a different thing altogether from auditing accounts, say, of a Joint Stock Company. The methods of business, the aims, the accepted practices are different. It is a speciality in auditing. For such service we have in the United Kingdom, under our two Acts, a body of specially skilled "public auditors," annually recognised by the Treasury, who are the people most competent for the work. By all means let us get away from the two unskilled men who are now permitted, as an act of grace, to pass accounts, or else supplement their audit by one by an officer of some Union. But a State audit is the worst possible remedy for whatever may be amiss. A skilled auditor appointed by the Union of which the society inspected is a member is sure not only to possess the requisite technical knowledge, but also a direct interest in making his inquiry searching and going beyond the mere actuarial testing of figures and the comparison of the entries with the vouchers. And his inspection also possesses this very great advantage that it does not come to an end with the report. For there is the Union with disciplinary powers at its command to see that whatever may be wrong is set right. In this respect it stands altogether by itself.

The selection of members will call for exceptional caution only in the case of one distinct type of credit societies in which, liability being necessarily unlimited, all success, and even solvency, must depend upon the moral character of the members. Generally speaking we may well say "the more the merrier," although the character of Co-operation forbids touting, such as is recommended in some not overwell instructed quarters. For we must try to make sure of quality. "The best security that a co-operative society can give," so M. Luzzatti has laid it down, "is the quality of its members." There are some few cases however, in which, for the sake of the requisite "bulk," it must even be judged permissible to extend the services of a society—on differential terms—to non-members. This has happened in Germany in respect of very large contracts—as well as for defensive demonstrations. It frequently occurs in Co-operation for the sale of live stock, for the supply of electric power, for the co-operative employment of threshing and other large machinery and the like. On the other hand there are also likely to be cases—more specifically among credit societies, but also among productive—in which the secession of a large number of members may call for a consideration whether the society should continue or wind up while its number is still complete. That will apply specifically where there are liabilities to meet, from which seceders might escape.

In respect of the area to be covered organisers will do well not to tie themselves down too pedantically to any one principle. There are people who will not hear of anything but small parish societies, serving as units for the fabric. And such pedantic principle has among ourselves in practice led to the all but drumming out of the most active society in the kingdom, which had accomplished more for practical Agricultural Co-operation

than all the rest among them, out of a Union. That is ridiculously overdoing what as a general rule is right enough. There is a very great deal to be said for large societies. Wherever you organise you will have to pay regard carefully to local circumstances. Capital societies have been formed occupying large areas. The point to be kept in view is that in a large society small men should not see their interests neglected. That not only is perfectly compatible with extent of area, but also corresponds with the interests of the larger men in the society themselves, whose object it is in their dealing to produce "bulk" and to keep out competition. The Eastern Counties Farmers' Co-operative Association covers portions of three counties; and in France there are Agricultural Syndicates extending over entire departments.

We may now suppose our co-operative society to have been formed, its officers to have been elected, a simple system of accounts to have been decided upon and the whole organisation got under weigh. One of the first points to occupy its attention will be the question of funds. Without adequate funds nothing is to be accomplished. Now, obviously the amount of funds required will have to depend not only upon the area to be covered and the number of members to be served, but also upon the particular business which the society selects for its operations. The choice of such business, conversely, will have to be governed by the amount of financial and trading strength present. Now on this point a word of caution may be in place. A society will have to cut its coat according to its cloth. With ample support and adequate means to begin with, it may set its hand to large and varied transactions. But that is not likely to happen in the majority of cases. And there is great virtue in not beginning with excessive ambitions, especially on untried ground. There is danger in starting

on a race with the constable. There are co-operative undertakings which imperatively call for a bold plan of campaign from the very beginning. Such ought certainly not to be attempted without an abundant supply of cash being assured. We have some huge co-operative dairies, grain storing warehouses, electric power works and the like, which it would have been a gross mistake to begin upon timid and tentative lines.

Generally speaking, however, the first impulse given to the formation of a co-operative society will be the want felt, among people with only little capital, of a cheaper or better supply, or of more advantageous disposal of agricultural produce on restricted lines. It will be well to begin with such one form of business and to expand and multiply services only as transactions increase and the society acquires financial and trading strength. There are many large and powerful co-operative organisations which began in the humblest of ways. One such example is that of the great "Imperial Union" of Germany, now composed of about twenty thousand societies, which started on its triumphal career in the early eighties as a little cluster of struggling local supply societies doing severally very little business. In the same way French Agricultural Co-operation, now so highly developed, began with "Agricultural Syndicates" acting, in their own words, merely as "letter boxes," for the receipt and transmission of orders. Money they had none; and the law prohibited their buying and selling on their own account. *Chi va piano va sano.* As business increases, on the other hand, it will be well to extend the working ground as opportunity offers. As in the popular proverb, we may in this connection couple the initial "waste not" with the subsequent "spare not." The Danish principle, of limiting societies practically for all time to one particular function each, and so multiplying societies, will

scarcely suit our own case. We like going to one shop. And there is so much that may be conveniently combined, with economy of managing power! Also Co-operation engenders Co-operation. Dairy societies, for instance, have proved most fruitful generators of other Co-operation. The society which buys may also without prejudice to its buying sell; the society which employs motive power during certain hours may apply the same motive power to some other service at other times. There are forms of co-operative societies which have by fixing more belts, figuratively speaking, to their shafting imparted an active stimulus to new forms of Co-operation which have proved exceedingly useful. A supply society becoming also a sale society is the simplest form of such multiplication of services; and, almost by its very nature, it has succeeded. For the same capacity that suffices for buying will do so for ordinary selling—selling, it may be, beyond the province which the supply practised covers. The man who supplies milk requires feeding stuffs and other articles. In all probability he also has eggs to sell and, it may be, table poultry. Then, where there is power, the dairy can supply only partial employment for such and will leave a balance which almost seeks for other employment in off time. In the choice of a branch of business to be taken up it will be well for societies to keep the following two rules of safety steadily in view.

In the first place, Co-operation being, as it has been laid down, simply a union of efforts among more or less similarly situated persons for the attainment of a common end, it will be well to study equality in position among members, calling—except in supply business—for something like equality in stake. It will be well to keep out very glaring inequalities. In Supply Co-operation, of course, it does not matter: for there everybody buys according to his needs and that settles itself. But in

production or common work the "big" member may become very inconvenient to the small, and, vice versa, the small to the big. That is why the manufacture of sugar out of sugarbeet is found to be very difficult to organise on fully co-operative lines. There must needs be large growers or shareholders in such an undertaking, who can scarcely be indifferent to being placed on a dead level with their small comrades in the matter of the vote. To a certain extent this objection is also found to apply to the supply of electric power.

In the next place, as already observed, whatever involves risk is carefully to be avoided. Accordingly trade in articles of a risky character must be ruled out. An example taken from Burgundy will illustrate the meaning of this. Burgundy grows large quantities of black currants, a considerable portion of which find their way to our shores to be among ourselves consumed in the shape of jam. To gain a larger profit out of the sale the intermediary dealers combined to a "ring," and oppressed the growers. The growers after a time retaliated by combining in their turn, co-operatively, and selling their goods in common. The dealers' ring could not stand against this, because black currants are a tolerably steady crop with a steady, assured market, without, therefore any serious speculation in the business. The very same thing was tried with hops—and Co-operation failed, as in this application it has failed pretty well everywhere (except where subsidised). The reason is that hops are a most uncertain crop, to begin with, the consumption of which likewise varies a great deal and the price of which is tossed up and pulled down in a way not to be foreseen. This matter will be more fully explained in its proper place.

To return to the question of funds—on this point, as on all others in Co-operation, members will do well

to rely as much as they at all can manage, upon their own resources. There is an eagerness for borrowing now in vogue which threatens danger. People want to borrow for every conceivable purpose, to the saving of their own pockets, enlisting the risk of others for their own benefit. We have seen what that has led to in the cases of German and Austrian wine societies and grain stores. In this country we have had even co-operative supply societies, which certainly ought to be able to provide their own cash—seeing that their business is cash business, thriving, not upon capital but upon custom—asking for “credit.” Now credit is an admirable servant in its proper place, but an execrable master. And to rely upon it, not for an occasional, temporary requirement, but for laying the foundation of business, is to court disaster. There are exceptions. The Danish creameries and bacon factories began with borrowed money, as did also many a co-operative dairy in Germany. Conditions were such that banks could trust these concerns, more especially in view of (in Denmark) the unlimited liability of members engaged and (in both countries) the binding contracts obtained from members to deliver all their produce for an extended period. On the other hand repaying—in the case of creameries by so much, as a first charge, on every gallon of milk used—is an easy process, which has answered well. But we are in this country disinclined to unlimited liability, except in one single case. Accordingly among ourselves one essential condition drops out of the suggested bargain. We should not be overchary of taking shares. Those shares may be large or small, according to circumstances. A small share is easy to pay up, but it will not purchase as much as a large one. Nevertheless under certain conditions it is quite sufficient. And with a fair share capital in hand, supported by sound management, our society will be able, in case of need,

to obtain credit when such is really necessary, on the strength of its own solvency. However the fact ought not to be lost sight of that Co-operation is distinctly intended as a stimulus and help to thrift. It is not to be dependent upon others. It wants to stand upon its own legs. It is, as has already been said, not to make members rich directly by gaining them profits, but to make them better off by rendering economies possible in business, out of which to accumulate money. There is a good deal of financial strength to be got out of accumulating reserves.

A society may, accordingly, well look to its members for a sufficient provision of working capital. But it has a right also to look to them for more. It has a right to look to them for loyalty in their dealings with it. Not a few people seem unable to realise this. To them their society is only a new shop, at which they may deal or not, at their pleasure. Hence they yield to the seductive blandishments of interested dealers anxious, for obvious reasons, to break up the society even at a temporary sacrifice, giving them part of their custom or their sales—and that generally the most valuable part; for the dealer in making his preferential offer is wont to be eclectic—and leaving the society to manage as best it can with the rest, which often enough is mere rubbish. No society could successfully carry on business on such lines. What the members acting as has been instanced forget is, that the society's interest is *their* interest, its gain *their* gain, its loss *their* loss. It is to provide for them what they cannot otherwise secure—an independent, steady and trustworthy market, or else a source of supply for all seasons. If it is to do this, it must have their full and loyal support, as a matter to be relied upon. Organisers of Co-operation on new ground, especially if it be Agricultural, very commonly find that this is not at

once understood by those for whose benefit they are acting. "Perhaps the greatest difficulty," so writes Mr. J. S. Corbett, the organiser of the "Wilts Farmers," "has been to instil the true spirit of Co-operation in the minds of our members, and to make them understand that we are working for the benefit of the whole of our members." There will be many to echo this complaint. Having a quantity of produce to dispose of, coming in steadily and regularly in batches to be foreknown, the society can make sure of securing a market. Not otherwise. In buying for members it is the certainty which it possesses of getting rid of every particle of its purchases which enables it to contract for large quantities at preferential prices. Take away the certainty of support and its position becomes altogether untenable. It is for this reason that so many societies abroad, the successful Danish ones at the head of the number, have made it a standing rule to bind their members to exclusive dealings with them in all such articles as they happen to deal in—or, at any rate a substantial fixed proportion of them. Whether we in this country accept the same stringent rule or not, loyalty of members to their society is a cardinal condition of success in co-operative action. In a Report contributed to the "Journal of the Board of Agriculture" the spokesman of the Eastern Counties Farmers' Co-operative Association—the success of which has already been referred to—says: "The Committee consider that the success of the business may be largely attributed to the fact that, owing to the support which members have given in the way of placing their orders with the Association, it has been able to secure competent and expert managers, whose service, in conjunction with that of the Trading Committee, renders the Association one of the best trading bodies working for the interest of the farmer in the Eastern Counties. The Association is, in effect, a large merchant working for the good of the farmer."

It remains to mention the very important point of Federation—Federation or Union. On the face of it, if there is any good in Co-operation on a small scale, there must *a fortiori* be good in it also on a larger one. It is not only that the larger the constituency, the greater will be the bulk of goods to be dealt in, the more propitious accordingly will be the conditions for advantageous buying and selling. The larger the constituency the greater variety of services also will it be possible to render; and the more skilled, and better skilled, assistance will it be possible to call in; lastly, the more purely and effectively will it be possible to organise Co-operation. Union is required for two distinct purposes. The one is business; the other is propaganda, common action—defensive or otherwise—and control. The Co-operative Wholesale Society and the Co-operative Union are severally examples of the two kinds of organisations required. The two distinct functions which they stand for should not be confused, although in certain cases they may without prejudice be combined. Trade is one thing. The more custom you gather together, the more favourable will be your conditions for trading. The importance of this consideration is so obvious that in Germany for certain purposes even large Co-operative Unions—there are more than 26,000 agricultural co-operative societies in the Empire—have on occasion combined with non-co-operative but likewise agricultural organisations—like the *Bund der Landwirthe* and the *Deutsche Landwirtschaftsgesellschaft*—standing, for a large body of producers or consumers, and have found this to answer. It was on the strength of the waste of power brought about by separate existence, that in 1898, at the annual Congress of the Haas Union of co-operative societies at Karlsruhe, I ventured strongly to advocate such union with the Raiffeisen Union as has since been successfully established

(for business purposes) in 1905 and as has, commercially, proved a source of new strength. It was truly pitiful to witness the waste of strength caused by separate existence. And if we look at some of the distributive services to be rendered in detail, we cannot fail to realise how indispensable is combination on a large scale to some of them. Let alone big purchases and contracts—as in Germany for potash salts, which have become a monopoly—and sales of graded produce, how is a single society profitably to establish electric power plant, or to secure for its “brand” of butter, bacon or whatever it be, sufficient recognition?

Separation moreover shuts out those justly famous “Control Societies” which, originating in Switzerland, have by way of Denmark overspread the best part of the Continent. Their services, which are most valuable, come distinctly under our present head. Their first office was simply to measure the quantity of milk given by each cow, so as to permit a judgment as to which animal was to be marked out for keeping and breeding, or else for being got rid of. But the skilled experts employed have long since gone much beyond such narrow conception of their duties. They now instruct the cowkeepers how to feed, and how otherwise to treat their cows; they teach them what breeds to select, how best to grow the crops raised for fodder; in fact they instruct them in all particulars of their farming—rotation, cultivation, dealing with the produce and so on. In Germany, where recourse to legal proceedings is common and the law is intricate, agricultural co-operative unions provide even legal advice and the services of experienced solicitors for members of their societies. In dealing with Insurance Companies they prevent members being beaten down by Company valuers, sending their own experienced representatives, carrying with them all the prestige of the powerful Union, to stand up for them.

Of course such things require to be organised. We have in this country begun—under this head—on the right lines by organising local sections which are eventually to find their commercial head in a Central Society—a Co-operative Wholesale Society of some sort or other. For propaganda, organisation, the maintenance of common touch, common resistance to hostile movements coming from without and last, not least, control, so as to keep Co-operation pure and uniform in essentials, and finance safe, we require a “Union.” Such Union likewise wants to be organised. In this respect we have made a poor beginning in England. Our neighbours in Ireland have acted on far sounder lines, bringing together a thoroughly representative institution, in which the societies are masters and the General Meeting is—like the Co-operative Union Congress of industrial societies in this country—a Co-operative Parliament. In the Agricultural Organisation Society the representative principle has thus far remained conspicuous by its absence. But you cannot have a sound Union without it. It is to the observance of such representative principle that the great German Imperial Union owes its success. It is all one. It acts together, it trades together. But every section has its own independent position, its own independent government, out of which several governments the central government is composed. The mere stimulating effect of such organisation is remarkable. Every country or province is enabled to contribute to the common stock that one particular form of Co-operation in which it excels and so, by a healthy and friendly competition, the entire body becomes enriched. One section excels in the application of electric power and pushes its experiments on. Another excels in the sale of live stock and experiments in that for the benefit of the Union. A third scores with its grainselling organisations. However the gain resulting

locally becomes at once common property. Such organisation also provides admirably for a competent highly qualified governing staff. It is the best men, the best administrators, the most experienced leaders everywhere who are elected to the Central body? And such organisation secures for the Union a prestige, power and influence which nothing else could provide. The Union speaks and acts with unmistakable force as the undoubted representative of collective opinion in its particular class. It could not do this if it consisted of a dozen or score of practically self-appointed persons representing only their own good will and zeal. One may indeed hope that long time will not elapse before we attempt to apply the same system in this country.

In what has been said above the main guiding principles for setting Agricultural Co-operation in motion appear to have been given. The various points suggested will necessarily crop up again in the succeeding chapters, in which Co-operation in its various forms, as applied to Agriculture, will be discussed somewhat more in detail.

III.—CO-OPERATIVE SUPPLY OF GOODS.

The form of Co-operation which lends itself most readily to practice, amid any surroundings, is that of common supply. That is why our industrial co-operators have taken it up first of all. It involves no additional expense or sacrifice. Certain goods have to be got in any case. The money has to be spent. Collective buying simply cheapens the purchase or improves the quality—which from our point of view both come to the same thing. And that is a thing valuable to the purchaser. There is, as a general rule, not much special competence or training required for the management of such Co-operation. Its organisation is easy and so is its control.

All this applies to Agriculture as it does to working-men's or other people's supply of domestic requirements. So far as it is intended for Agriculture proper—as distinguished from rural housekeeping—it applies indeed with additional force. For the penny to be saved in agricultural co-operative supply is in truth a penny "got," a penny not merely rescued from regular outgoings, but one which will bear fruit, being destined for productive employment. It deserves to be pointed out that, judged by the modern standard of perfected agriculture, most of our British agriculturē is under-financed. There may be much money laid out in the soil. But it is not that which produces paying crops or paying live stock. We have to-day got as far beyond Jethro Tull's simple theory, which made the soil the source of all plant nourishment, as we have beyond the ancient chemical formula which recognised only four (in truth, very composite) "elements,"

namely :—earth, fire, water and air. The land is to-day little more than the farmer's "workshop." It is the money which goes into the land which produces the return. And of such money practical farmers as a rule have less than they should. An accepted rule, when the author was young, was that there should be £10 to the acre—which was not in every case forthcoming. To-day we are aware that there can scarcely be too much working capital. The farmer who possesses much capital—and who, in addition, is also a man of business, with business ways, calculating things beforehand, and cutting down waste—nets a good income. But how to procure access to such money for him who does not possess it? Co-operative supply offers the easiest method. If only practised on ordinary business lines, it is sure to leave something over. In industrial Co-operation the ordinary overplus is about ten per cent. That, if carefully husbanded, may gradually produce a fairly substantial addition to existing working capital. In any case it is bound to make what working capital there is go further. And it provides an excellent schooling for Co-operation of other forms.

Under such circumstances there cannot be thought to be anything surprising in the fact that agricultural—like industrial—Co-operation has everywhere, or almost everywhere, begun with Supply, the cheap provision of goods, or the supply of better goods for the old price, by means of collective purchase; and that in the amount of its turnover such Co-operation now overtops all other forms. It was with the provision of cheaper bread that Raiffeisen began his beneficent work. The supply of live stock followed next. Money—or credit—stood third, in natural sequence. It was with supply that Herr Haas, whose great "Imperial Union" now, with its 20,000 societies, overspreads all Germany, entered upon his economic campaign. And similarly it was supply which

the French "Agricultural Syndicates," under the guidance of Professor Tanviray, first took up. We ourselves also, in the sixties, began with supply—mainly with the supply of superphosphate, which was at that time, under Professor Liebig's teaching, our favourite, if not our sole, artificial fertiliser.

From supply a co-operative movement may, as in fact it has done in Germany and France, develop to the grandest proportions and the most varied composition; for there is no form of Co-operation which cannot be grafted upon supply. Supply may not be everywhere the form most urgently needed. We may want dairies first, or egg societies or societies for the provision of power or of credit. But in any case we cannot do without supply.

And to co-operative supply agriculture owes a great deal—not merely the money saved upon the purchase of necessary goods. Supply has in most cases trained to other forms of Co-operation. And it certainly trains to better farming by the very act of cheapening the goods required. More have in consequence been used. And *l'appétit est venu en mangeant*. More being used, those goods have been used more scientifically and with greater discrimination. And the results have not failed to appear in improved yield. And in the end the more enlightened dealers and manufacturers themselves have overcome the grudge that they at first naturally enough bore to Co-operation, because they find that, thanks to it, they get rid of much larger quantities of their goods and so reap in aggregate returns more than they sacrifice in price on single lots.

And supply is so easily organised! The French began, as observed, with an institution which acted simply as a "letterbox," collecting orders, bulking them for transmission to dealers or makers, and levying on the saving so effected a small toll to pay its own expenses.

In some circumstances we may have to begin in something like the same fashion. It cannot answer to go, in money or in custom, beyond our actual power—the measure of which it cannot be difficult to ascertain. Over-shooting such mark may mean loss beyond what appears to follow from the actual disappointment, because it brings embarrassment in its train. Should we find ourselves successful, we shall be easily able to extend our business—as Herr Haas has done, as Raiffeisen has done, as the Eastern Swiss Agricultural Co-operative Union has done, all of them having started from very humble beginnings. The great point will be to study our market and make sure of it. Our first supply must be distinctly adapted to the demand which we may foretell will be made upon it. To that we must stick. We cannot afford to incur any risk, either in this matter or—let us add at once—in the matter of payment.

The question now to be dealt with is this : How should we organise ? The point has been referred to in the past chapter ; but we cannot altogether evade it here. Shall we begin, with small parish societies ? We may have to do so. Even so we stand to gain. But when people refer, as a precedent, to our early industrial societies, which were humble indeed, it will be to the point to remind them that the object of an agricultural co-operative society of to-day is not quite the same as that of an industrial store of those days. In an industrial store smallness means the imparting of business (and other) education to people who need it badly, also moral training, the formation of character. Our industrial co-operators started from a very humble level. They have long since exhibited, under altered circumstances, a decided preference for large stores—to be worked, where necessary, by branches—in which economy is greater and transactions become more profitable. It is likely to be the same thing

in Agricultural Co-operation. In agricultural supply we look, as a rule, less for direct—there will be plenty of indirect—educational results than for economic. Such results will of course include an awakening of a sense of common interest, linking men together. But we no longer stand upon the ground of early Rochdale. The greater the bulk, the more profitable is the business likely to be. Steam and electricity have overcome many of the early inconveniences of distance, and perfected banking arrangements have facilitated money transactions. Business is accordingly easier than it was, which is in favour of large societies.

The first thing a society will have to turn its attention to, when forming, is the provision of funds. The selection of members will in supply occasion no difficulty, because unless—which should as a rule not be—credit is allowed to members in respect of their purchases, there will be no risk incurred.* There can in supply be no suggestion of other than strictly limited liability. And observance of the wholesome canon that no business is to be entered into with non-members—unless it be, under special arrangements, with a view to enlisting such as recruits, to drop into the ranks as time goes on—is likely soon to serve as a magnet to attract more members. There are precedents distinctly in favour of this. There has

* The "credit" ostensibly allowed to purchasing members in some German societies particularly strong in funds and possessing a secure hold upon their members, and also in some Irish societies, is not "credit" in our present sense. It is merely the application of a well established commercial custom, which permits a fixed—but not extendible—interval between delivery and payment, to agricultural trading. What makes "credit" in its ordinary sense dangerous is its extendibility and general uncertainty. The "credit" here spoken of will be applicable only in few cases. As a general rule the accepted maxim should be: "No credit whatever!"

been no more effective recruiting officer for German Agricultural Co-operation than the legal prohibition of dealing with non-members. But funds there must be. In supply there can only in very rare cases be any call for a resort to credit on behalf of the society. For cash payments provide for quick returns. What a supply society requires it ought therefore to be able to provide out of members' own pockets, in the shape of shares—the amount so collected to be systematically added to by a studied accumulation of reserve. Where there are small men to be catered for, the value of the share need not be large. Men with more abundant means will in that case be able to subscribe further capital by taking up more shares. The Eastern Counties Farmers' Co-operative Association makes the holding of shares proportional to the acreage occupied, calling upon members to take up one 5s. share in respect of every ten acres farmed. And although of that sum only one fourth is actually called up, the capital so raised appears to have been found fully sufficient.

Funds being provided, the society will have to make sure of its market.

The study of such market is really a requirement of wider bearing for a society than may appear at first glance. It applies alike to the selection of the goods to be dealt in, the number of which may at first have to be limited, and to the quantitative extent of its dealings. Such society should not buy goods "on spec." The "letterbox" system of the early French Agricultural Syndicates already alluded to shows in an exaggerated form what its dealings essentially should be—buying only what is certain to be sold. Of course, as a society's business grows, it will be impossible quite literally to adhere to this rule. There must then be a stock. There must be goods purchased in advance. Very possibly

there may be some such necessity even at the outset. But the advance to such development should be conducted with circumspection. Stocks of goods to be held over have caused severe loss to more societies than one. It will be for practice and experience to determine how far in this respect each society can go. The success achieved by industrial societies, some of which hold large stocks, shows that proper discrimination may well be learnt. However, agricultural societies are in this matter differently situated. Industrial deal in household goods, articles of daily requirement, for which demand is on the whole continuous and to be foreseen. Agricultural societies deal—in the main—in specifically agricultural commodities, each of which bulks larger in the stock and the holding over of which may mean keeping them on hand, "eating their heads off," for a year or not much less. Also the value of those commodities is much more subject to fluctuations. Therefore stocks want to be avoided as much as possible, more especially in small societies, which are likely to be weak in financial power.

The necessity of command of a market is also of importance as making for strength for the movement as a whole, which effect should always be kept in sight. Societies cannot aspire to a brilliant future all by themselves. Every single society will be the stronger, the better the movement thrives as a whole. There is an identity of interest, a link binding members together, on this larger scale also, which reacts very distinctly and promptly upon every single society. It is to the interest of every society that it should be able to provide itself with cheap and high quality goods. This is to be done only by combination with other societies and by the collective maintenance of a wholesale society. Now that means that there must be an assured market, a certain demand, to be relied upon and to be foreseen, also for the

wholesale organisation. The practice which makes purchase in respect of all articles that a society deals in compulsory upon its members is not very popular in this country. Not yet, at any rate. But it is freely applied abroad and is found to work so well that societies and members gladly submit to it. The supply of goods is under members' own control. Therefore they lose nothing by being compelled to buy—what they do buy—at their store; for they can insist upon good quality. But to the society it is a source of great strength to have an absolutely certain demand to rely upon.

A further point very deserving of consideration is this, whether a supply society should limit its supply of goods to agricultural requirements only—fertilisers, feeding stuffs, seeds, implements and so on—or whether it should extend its operations also to dealing in household articles—foodstuffs, piecegoods, hardware, groceries and the like. In some foreign countries there is a pronounced unwillingness to such extension, which is to a great extent not voluntary but enforced. Governments are fully willing to befriend farmers by promoting Co-operation; but in doing so they would rather make as few enemies in other quarters as they can. For tradesmen have votes—like farmers. And zeal for the welfare of “the middle classes”—which in continental nomenclature means the smaller dealers and manufacturers, who are official “*bons enfans*” and, like the farmers, coddled with grants as a supposed buttress against “Socialism”—is great. Accordingly in some countries—most notably in Austria and France—dealing in household goods is tabooed, and indeed actually forbidden by law. And even many Raiffeisen societies employ their powers to carry it on merely as a rod to be exhibited on the mantelpiece with a view to keeping dealers on their good behaviour. However there is a great deal to be said for

dealing also in household articles. And for districts like those that we have to think of in Ireland, it appears an absolute necessity, the salvation of the local population. For there is no prospect otherwise of breaking the sinister power of the gombeen usurer, which eats into the social system like a canker.

There are recommendations on other grounds as well, from a co-operative point of view. In many of our societies—even among tolerably substantial farmers—we have observed a far greater eagerness for purchasing household articles than farming requisites. And, indeed, the trade in the former bids fair to prove itself a pillar of strength to specifically agricultural supply. So it has been in Switzerland, among the agricultural population who have raised up to their own benefit what is in many respects an ideal co-operative organisation, the Eastern Swiss Agricultural Union (*Verband ostschweizerischer landwirtschaftlicher Genossenschaften*). Things went badly with that Union until, in 1890, dealing in domestic requirements was advisedly taken up. Purchase was slack, and so trifling was the annual overplus that nothing could be laid by for reserve. Indeed the chairman—who was also the main founder of the Union—Curt Schenkel, put it frankly to the General Meeting, whether under the circumstances they had not better give up the attempt on which, at his suggestion, they had embarked. “If our co-operative societies are not to grow,” so he remarked, “we must be prepared to see them die.” To prevent this it was that he proposed taking up distributive trading. His proposal being adopted, the Union at once bounded into prosperity. It doubled its turnover in the very first year, and kept up that rapid rate of progression for several years running. The business still keeps increasing. And the turnover in “Store” commodities is now more than twice that of purely agricultural articles.

"If our ranks are to-day more firmly united than those of other Unions," so Herr Abt writes in his history of the Union, "if we dispose of more ample means, such result is entirely due to our having taken up the trade in household goods. From the very outset the Eastern Swiss Union has looked upon this much disparaged distributive trade as the most brilliant point in its achievements." There could not be a stronger recommendation.

There are quite particular local reasons to boot why we should in this country take up distribution of household goods, which Herr Abt styles "the elementary school of Co-operation," as a pioneer and subsequently a milchcow for agricultural Supply Co-operation. For we are here more favourably situated than people elsewhere for making it the success for which Herr Abt has given it out. We have a large and wealthy co-operative distributive movement already occupying the ground, with two powerful Wholesale Societies at its head, which could scarcely refuse to accept well constituted rural co-operative societies as members entitled to deal with them on regulation terms. There is accordingly a cheap and trustworthy source for the supply of the goods to be dealt in ready to hand. Members of our distributive stores buying in this way net, as has been already stated, as a rule ten per cent. upon their trade. That ten per cent. "profit" must be a welcome assistance to the slowergoing agricultural trade.

And there is more. By such means we have a good prospect of extending the distributive system of Co-operation, which has proved a godsend and a fruitful root of wellbeing, happiness and social and economic advance to our industrial population, over our rural districts also, in which it must prove very difficult to establish it by other means, and of thus bringing economic relief of the most readily attainable and beneficent kind to our country population.

And there is this weighty argument to be taken into consideration. Combine the two services, give to the rural population that which they need most urgently, and the want of which they vividly feel, that which makes a call upon their attention every day, and which may every day reward them with some benefit to be reckoned up in figures, and you bring them at once to realise the benefits of Co-operation in other forms as well, to identify themselves with their particular society, to feel strongly that the success of that society is their own success, and accordingly, to become thoroughly loyal to the society,—which is one of the first conditions for its success. Such has most notably been the result in Switzerland.

And let us advance one step further! The combination here insisted upon is bound to promote those close and amicable relations which one may be thankful that it has already been possible to establish between agricultural and industrial co-operative unions. Such relations there ought to be, and they ought to be close. Because at bottom we have the same interests and we may be useful to one another. We can bring to the industrial movement additional strength, extended membership, increased custom—which means more advantageous conditions of trade. The industrial co-operators, in their turn, can bring us a better knowledge of Co-operation, co-operative spirit and, as the most visible benefit, abundant custom for the disposal of our agricultural produce. Our industrial co-operative societies annually buy enormous quantities of agricultural produce which is necessary for their trade. Mr. Cheney has calculated that the quantity of such produce annually disposed of by the great—and excellently managed—Society of Leeds alone requires 60,000 or 70,000 acres for raising. And that quantity, large as it is, cannot compare with what the Wholesale Societies absorb. Here is a market

which we, on the agricultural side, may well be expected to cultivate. And we may easily cultivate it, because the industrial societies have generously come forward to open to us its gates and to intimate that, quality and price being equal, they will in buying give the preference to co-operative produce. It would be foolish, even if there were no other grounds, to neglect such an opportunity. Only we shall have conscientiously to respect our allies' rights. In the extension of distributive trade we are championing their cause, fighting their battle. However in some districts they are fighting that same battle for themselves. In such we shall have carefully to abstain from overlapping into their domain.

And, lastly, such development of mutual relations promises to bring nearer the likelihood of our finding additional strength in the Co-operative Wholesale Society becoming also our wholesale society, for the supply of goods. That would, in the author's opinion, be the very best solution of the "wholesale" difficulty that could be brought about. Of course there are other solutions likewise practicable. We have tried one; but it has proved anything but a success. We *must* have a wholesale organisation of some kind or other, even for our purely agricultural trade. There is no doing without it. We must carry collective purchase to the highest attainable point. Our industrial co-operative movement, now so powerful, and occupying so commanding a position, would be weak indeed without its Wholesale Societies. It is the wholesale trade which has made it so flourishing.

The result has been just the same elsewhere in Agricultural Co-operation, wherever wholesale purchase has been adopted. The Raiffeisen Union and the Haas Union are strong through their wholesale purchases—and, let me add, as a supplement to them such as we can easily adopt in this country, through their "district purchasing

associations" (*Einkaufs-Vereinigungen*), which, in fact, preceded the wholesale societies and still maintain themselves by their side, by reason of their recognised utility, because they cater for distinct local wants, such as do not in every instance concern the entire Union. We are actually forming "sectional" organisations qualified to engage in the same class of business. But we want to carry that method further. And on the top of all we shall, as observed, want a wholesale organisation. The industrial Wholesale Society would best answer our purpose, because it has the entire machinery ready—"it's got the ships, it's got the men, it's got the money too." Everything is ready organised. Depôts and markets are distributed all over the country. The Society already does a large trade in farming requisites—seeds, fertilisers, feeding-stuffs. All that it would require, to fit it for a more complete agricultural service, would be expert agricultural advice, such as we, on the agricultural side, might readily give. There is a difficulty, it is true, in the present wording of the Wholesale Society's Constitution. But we know—if from no other precedent, from that which gave authority for taking over Insurance business—with what ease such difficulty may be got over by a simple vote, a matter of a few minutes.

There is one more point which calls for consideration. Our fellow co-operators in the industrial world have alike cheapened their supply and secured for themselves a far more independent, and therefore stronger, position by manufacturing articles for themselves. It makes their organisation more self-contained, more self-reliant and better qualified to provide the exact articles that are wanted. In Agricultural Co-operation we have never had anything of the same sort. Seeing what large quantities of superphosphate were bought by the co-operative County Associations then existing, I questioned a friend

in the movement more than forty years ago, whether it had ever occurred to their members to manufacture superphosphate for themselves. The reply was a negative. "They have never had the enterprise to attempt that." In this respect we stand to-day precisely where we did forty years ago. Our co-operators have met with resistance and hostility from makers of all sorts of agricultural requirements, more particularly from makers of agricultural machinery and implements. There have been times when it was difficult for a Co-operative Supply Association to obtain machinery of certain kinds otherwise than by the interposition of some friendly individual buying in his own name. The Germans, more enterprising than ourselves, have met such opposition by starting their own machinery associations, which, as buyers, come into the market with so much prestige that makers hesitate before refusing them; but which also—like some of their craftmates in the United States—do not a little makers' work for themselves. Of course the making of machinery of certain designs identified with particular firms—and probably patented—is wholly out of the question. But, apart from buying and distributing such machinery, there are plant and installations, for electric lighting and power, and for industrial enterprises connected abroad with agriculture and similar things which are provided with greater economy by such associations, whose work is appreciated accordingly. And there are repairs, for which special societies have been formed. In Germany both types of societies work well and find plenty of custom. In Italy the sale of modern implements and machinery, and tuition in the use of them, are committed by those useful institutions the *Cattedre Ambulanti*, which are veritable pioneers of Agricultural Co-operation, to agents permanently stationed in selected localities, who likewise attend to repairs, which they either execute themselves on the spot or else entrust to central workshops.

A far more important class of business to which co-operative effort is directly applied is the making of artificial fertilisers. In the United States farmers have taken this up as a matter of profitable business. On the European Continent* agriculturists have really been driven into it by the boycotting and deliberate raising of prices against them practised by "rings" of makers and dealers, of divers wars with whom there is a long history. There have been some abortive attempts, such as for instance the working of a superphosphate factory by the Raiffeisen Union, which was much too paltry an affair to prove of any avail. And under this head we may also class the over-ambitious and therefore futile acquisition of nitrate mines in Chile, for working on their own account, by German agricultural societies. In this matter the mistake so common in co-operative enterprises was made, of overestimating the power of one's own capital. That capital appeared large. But it was a mere popgun as compared with the heavy ordnance of the capitalist mineowners, against which it was to be pitted. And it failed.

However the Italians have proved distinctly successful in their manufacture of superphosphates, which is now carried on, on their own account, in ten establishments. It was a makers' "ring" which provoked them to action. Makers' "rings" had been very busy in this particular trade all over the Continent. There were "corners" in France, in Germany, in Belgium. In Switzerland the fight was a tough one, but in the end the farmers beat the manufacturers, not by manufacturing for themselves, but by advisedly tabooing superphosphate and buying their phosphate in the shape of Basic Slag. The Swiss have gained more similar victories over dealers in this way.

The Italian manufacture of superphosphates likewise took its rise in resistance to a manufacturers' "ring."

Manufacturers' aggression began about 1895, and accordingly the Agricultural "Chair" of Mantua—consisting of a Professor directed and supervised by a Council of local agriculturists—pleaded in the co-operative press for co-operative manufacture. However the time seemed not yet ripe for such enterprise. Many people doubted the possibility of success and inclined to "capitalist" action, if any, but to be undertaken by farmers and landowners. For some reason or other at that particular time superphosphate went down quite suddenly not a little in price. That favourable state of things came to an end in 1897, when the manufacturers, not solely of Italy, but also of France and of Belgium, combined once more for common action to drive up prices. Agricultural forces were accordingly mobilised afresh and by 1899 sufficient capital appeared to have been gathered together to justify a decisive move. The first works were set up at Mantua, where business was begun in 1900. There are now ten manufacturing establishments at work—turning out among them about 150,000 tons of superphosphate every year:—at Mantua, Portogruaro, Lendinara, Adria, Bagnolo Mella, Piacenza, Cremona, Novara, Cerea, and Milan. They are all of them active, all prosperous, enjoying a good market and losing little money, if any, by bad debts. To set up and work them something like 8,000,000 lire (£320,000) has been subscribed in shares ranging in value from 5 lire (4s.) up to 50 lire (£2). The institution being "co-operative," no share-holder is under the existing law allowed to hold "an interest"—as our law terms it—in the concern exceeding 5,000 lire (£200). The establishments manufacture their own sulphuric acid, as is usual in Italy. Since their formation they have combined for common action to a Federation which, however, leaves every several concern to manage its own business, sell its pro-

ducts and answer its responsibility for itself. Opinion—and accordingly practice—is still divided upon the point of a binding undertaking to be exacted from shareholding members to buy a certain minimum quantity of the product annually from the works. Obviously, Professor Raineri, the President of the Union of Italian Agricultural Co-operative Societies, and late Minister of Agriculture, is right in maintaining that such undertaking there should be. Without possessing an assured market for its output a manufactory could not be certain of selling its goods or able nearly enough to proportion its output to its sale. However the societies which have not put such stipulation into their rules have thus far not suffered by the omission.

There can be no doubt that, in respect of the manufacture of superphosphate the Italians found themselves on strong ground for this reason that in their markets the raw material, being shipped from Africa, is remarkably cheap. However it is, of course, quite as cheap for non-co-operative makers as for co-operative. Italian success in this matter is mainly due to loyal membership, businesslike organisation and businesslike management, the application of which coincides with a period of agricultural *risorgimento*, in which, under the stimulus of new technical education, far larger quantities of artificial fertilisers are used than was previously the case. Undoubtedly there are other articles which co-operative societies—or rather, let us say, which unions of co-operative societies—might with advantage manufacture for themselves. And the subject of the manufacture of one's own goods is one which may well engage the attention of agricultural co-operators.

IV.—DISPOSAL OF PRODUCE.

GENERAL REMARKS.

"Supply" has just been spoken of as the "easiest" form of Co-operation to practise. But, easy as it is, and useful as it is, in the application of Co-operation to Agriculture it can scarcely rank as the most important. The palm of importance undoubtedly belongs to the ultimate disposal of the produce raised, whether such be effected by direct sale, or in a more round-about way by means of previous transformation into a more readily marketable commodity. In our present aspect the two things come under the same head. This is the task by its accomplishment of which Agricultural Co-operation will ultimately have to be content to be judged. Buying fertilisers, feeding stuffs, machinery and the rest of it cheap is of comparatively little value, so long as marketing does not crown the whole process with a remunerative return.

This fact it is which marks off Co-operation in Agriculture so strikingly from what we have become accustomed to look upon as "industrial" Co-operation—the Co-operation spread out over the length and breadth of this country, in the shape of the familiar and successful "Store." In truth there is nothing specifically "industrial" about such Co-operation. Rural folk may practise it as well. There is specifically "industrial" Co-operation, no doubt. But that is co-operative *Production*, which democratises Industry, emancipates the worker and makes him his own employer. Distribution has only very little to do with "Industry"—and that little in a non-co-operative

form, as with an ordinary employer of wholly dependent wage labour. It simply enables the man who has worked in non-co-operative industry to make his wages go farther.

It is well that Agricultural Co-operation should have been brought in at the point at which it has, in order that the difference between productive and consuming Co-operation should be made fully clear, and that a perfect heap of misconceptions should be removed, to which the absolute domination of Distribution has given rise; and at the same time that a firm and enduring link should be forged to bind the two branches of Co-operation more thoroughly together and so consolidate the co-operative movement. However much Manchester and Glasgow may in former stages have resented the intrusion of independent Production and the advance of Co-operative Credit, decrying them as "individualist," they cannot reject Co-operative Agriculture—however essentially "individualistic," in their narrow sense, it is bound to be—seeing that such Agriculture, settling a rural democracy in independent occupation on the land, each cultivator under his own particular vine and figtree, represents the very ideal ultimate aim of the Rochdale programme. Co-operation in Agriculture is bound to be "individualist," securing to every worker the just reward for his own particular labour, though "collectivist" at the same time as of necessity settling him in self-governing, self-sustaining groups. It is bound to be productive. And, being productive, it shares with industrial Production—as contrasted with Distribution (which possesses recommendations of its own)—this distinctive merit that in economically assisting the co-operative worker, it at the same time also improves him as a worker, makes him better instructed, better skilled, more resourceful, more valuable to himself, to his circle and to his country. It is a great distinction, to productive Co-operation to be able to

claim—and to maintain—this. Co-operative Production compels him who practises it to think, to calculate beforehand, to acquire technical knowledge and put it to practical use. There are no classes, no lectures, no books which can improve him in the same way. The business of the society is *his* business; *he* is responsible for it. And responsibility is, as Sir Robert Morier has justly observed, "the soul of all good work." The working together of many minds, putting to practical application in a concrete form what they may or may not have learnt theoretically from others, brings the point thoroughly home to every one and leaves an indelible impression upon each mind. And towards that effect the disposal of produce contributes a substantial share; for it marks the result of the process.

It will be necessary, of course, to discuss disposal in detail, as affecting distinct descriptions of produce, which have differently to be dealt with. Not, and only to multiply repetitions, accordingly, it will be well to deal here with the points affecting disposal in general only, and with brevity.

The aim of the co-operative disposal of produce is, of course, to provide a remunerative, but above all things a permanently available market. The price there realised ought to be as good as can be obtained; and, with the elimination of at least one middleman—in the majority of cases more—there ought to be no difficulty about making it good in the long run. However the main object will be permanency and continual availableness; for the producer wants to be sure that he will be able at any reasonable time to convert his produce into money; he wants to be able to calculate beforehand that, whatever befall, his corn or milk or meat or eggs will sell, and sell at a fair price. The real object of the German "corn-house" or granary is less to enable the local farmer to

take advantage of any special opportunity for turning an extra penny, than to provide him with an ever ready market, in which he may deliver at his own time, knowing that he will obtain a steady, fair price. So it is in the case of the Swiss "Cheeseries"; and so, in effect, in all other agricultural sale societies. Accordingly it is a mistake to make a practice of snatching at occasional speculative gains, which only unsettle the market and destroy confidence. Steadiness on one side is not attainable if there is not steadiness also on the other. Attempts to "rig the market" have cost co-operative grain-selling societies in Germany much money.

Now a steady market, obviously, is to be gained by quality and regularity of supply. For insuring the former, as will be shown, Co-operation stands in a particularly favourable position. The latter consideration brings into renewed prominence the point already insisted upon, that there must be loyalty to their society among members, and that it is the society's business to try to make sure that there will be such. Wherever that canon of Co-operation has been sinned against, the result of loss and disappointment has never failed to show itself. In the case of perishable articles, such as milk and eggs, the necessity of possessing a continuous outlet for goods is self-apparent. But it holds good no less in respect of other commodities, even corn, which is in a sense the farmer's "ready cash." Obviously arrangements will in each case have to be accommodated to the article to be dealt in and, in a higher degree still, to local circumstances.

Wherever produce can be satisfactorily got rid of in its natural shape, farmers will probably much prefer that form of disposal. However there are cases in which transformation possesses distinct advantages, either as raising the volume of net return, or as securing for the pro-

ducer out of his produce some valuable by-product for use in his farm—let alone that it provides larger employment for labour. Whatever be the object for which transformation is resorted to, Co-operation greatly facilitates—and it should cheapen—its application, because it gives access to it to the small cultivator. The sugar-beet grower and the co-operative cultivator of flowers on the “Côte d’Azur” find that they can get more value out of their produce by first turning it into sugar or else perfumery. Our British corn grower crushes his grain into grist, he may even grind it into flour; and abroad his brother farmer sometimes goes so far as to bake it into bread, because he knows that after the addition of the requisite labour he will obtain a better return. The Danish pig keeper cures his pigs into bacon, because it would be hopeless to try to get rid of them in any other shape. The German and French potato grower turn the starch of their potatoes severally into spirit or into commercial starch because, after paying them about the same price for the potatoes used, that leaves them in possession of nourishing winter fodder where, under the system of stall feeding, winter fodder is particularly valuable. Without Co-operation that certainly must lie altogether beyond the power of the small man. And in general, it will have to be admitted that in opening access to such employment of farm and garden produce to the small man,—who by himself evidently could not practise it—Co-operation performs an exceedingly thankworthy service.

In the assistance which Co-operation has in its power to give in the disposal of produce, there are several elements combining which go to make it effective.

The first is the creation of “bulk,” which, under all circumstances, makes commodities more marketable in the long run and secures to the seller a better command of the market. The German “Cornhouse” is effective

in raising the price of grain in the local market, because it answers for a substantial quantity, and because, thanks to such quantity, it has, in addition to the local, also the entire outside market, at a distance, open to it, which is closed to the small producer acting by himself. The French fruit and vegetable grower could never have attempted to send his strawberries, asparagus and like articles to England by special fast trains and boats, but for the considerable quantities to be moved, thanks to his Co-operation.

The second effective element in the assistance given is the systematic and, to coin a word, "guaranteeable" improvement of the quality of the article dealt in, which Co-operation is in a position to ensure. It is by quality and certainty of regular supply that these articles of agricultural produce can secure a steady and remunerative sale. We observe this in the better market commanded severally by Danish, as compared with Irish, eggs and butter. It is the Danish *winter* supply that makes the difference. And Co-operation is, by the discipline which the many of the same class, acting in unison, are in a position to enforce upon each single member, in a position to ensure these qualities more effectually than any other power. It cannot tolerate any negligence, such as a dealer might conceivably be prevailed upon to condone in some exceptional instance. The interest at stake is too great and too easily prejudiced. We are better off in this country than many of our neighbours in respect of the general trustworthiness of our farmers, who may for the most part be trusted to deliver up to sample, which farmers abroad have not been found to do with equal regularity. Abroad the standing complaint of organisers of co-operative sale in early stages is that farmers will not deliver up to sample. In none of the—after all only small—transactions that we have

thus far had in this country through the Agricultural Organisation Society has the same complaint been made. We have not yet really organised such service co-operatively. However we have disposed of single lots, say, of corn, which have invariably given satisfaction. Nor do purchasers appear to have been wronged in respect of other goods. But that is not by any means all that is required, say, when it comes to butter, or milk, or eggs. In these cases attention must, under the co-operative practice, be carried into minutiae, and it is possible for this to be done, because every member knows that his fellow member's neglect must mean loss to himself—and that not necessarily loss confined to merely one delivery, but possibly to the society's reputation, the value of its "brand," or "trademark," which he has laboriously helped to raise to its zenith by long patience and pains. Its reputation and the public recognition of its "brand" are what really a co-operative sale society may most reasonably hope to benefit its members by in the matter of price and regularity of sale.

The question is often put forward, in what precise manner a society had best proceed for putting its goods upon the market. And in spite of repeated and glaring failures—not in the late Lord Winchilsea's case only—people appear not a little inclined to hark back to the questionable practice of establishing depôts, that is, retail shops, in which a society, or a union of societies, is to offer its produce for sale in competition with the retail traders. That indicates a rather serious misconception of the sale society's proper functions and capacity, such as has rarely failed, where indulged in, to lead to mischief. Agricultural co-operators are *producers*, standing on a level with manufacturers in industrial business, and as such they may hope to acquire adequate competence to serve them for the purpose of sale of a particular kind.

Now manufacturers do not, except in quite peculiar cases, sell retail. It is not their business. They are not trained to it. Accordingly they do not understand it. It requires altogether different capacity from that which they themselves possess. There is risk and speculation in it which in prudence co-operators must do their best to avoid—more particularly on unknown ground. The professional salesman understands the retail market. He knows how to read its symptoms and to estimate its wants; he knows also how to safeguard himself when facing risk and embarking in speculation. The two classes of business are as distinct as Macaulay's two favourite specimen callings of bakers and piano makers. And the retail trader is there to assist and serve the manufacturer, just as the sculptor or the stonemason helps the marble-quarryman to enhance the selling value of his blocks by shaping into figures or moulding stones what the other rough-hews out of the quarry. It is quite enough to hope to train a farmer to become a good wholesale producer and seller to the retail market. For a retail seller he appears to be, of men of all callings, the last person cut out. The retail trader is the producer's necessary purchaser, who will serve him best if he is not provoked to hostility, such as an attempt at competition—likely to prove futile in the case of an agricultural society—is sure to arouse.

It is the failure to realise this point which has brought so many co-operative productive societies to grief. The collapse of those great German "cornhouses," which has given co-operative grain-selling temporarily a bad name, is in most cases distinctly traceable to the "shoemaker" not being content to "stick to his last." These societies would embark in speculative business for the sake of gain. They tried to "rig the market." They flattered themselves that they could make "corners" and dictate prices—and they failed. So did the German

vinegrowers' societies fail when they attempted to beard the retailing lion in his den of great popular centres and sell by the bottle and the glass. In so doing they got beyond their depth. The commercial leaders of the enterprise were not equal to the task which they had set themselves to accomplish. Their failure certainly ought not to be allowed to pass unconsidered.

There are only two classes of agricultural produce, thus far, in respect of which, for special reasons, easily to be discerned, retail trade by co-operative societies has answered; and even in their cases only partially by the maintenance of depôts or shops. (For the markets and sales of live stock, which are altogether to be recommended wherever conditions favour them, are evidently not to be brought under this head.) Those two articles are eggs and milk. And the reasons why they form an exception are, in the first place, that in dealing with commodities of so highly perishable a nature time has to be husbanded and there can be no question of carrying them from shop to shop; and, in the second, that the control required to ensure what makes a good market of necessity has in their case to be exercised at the productive head quarters, instead of at the retail end of the process. The crucial point in all sale is the control of quality. In the case of other agricultural produce, down to the rather perishable article of fruit, such control is naturally exercised by the consumer or in his place by the retailer—acting with a distinct responsibility and interest to be careful—either of whom can distinguish before purchase between good and bad. When it comes to milk and eggs, we know from the two proverbs, Cockney and classical, viz.—“eggs is eggs” and “*non tam lac lacti simile*” that control at the buying end is impossible, except it be after the event, in a punitive way, because the requisite criteria are only in gross cases

visible to the consumer's eye. Such control cannot be left to a hired servant, who has no interest in safeguarding quality, such as the retailer has in the value of his business, and the dairy or egg society in its trade. It is accordingly the society, in which the responsibility for quality resides, which has to carry out the control, testing and examining the milk and "candling" the eggs.

The matter admits of an easy practical test. Agricultural "Depôts" have been tried in all parts of Europe. Under favourable conditions they have answered in such exceptional cases as the sale of milk and of eggs, which stand upon a footing entirely of their own and in which co-operative retail trade has frequently been found to answer. Even in these undertakings, however—though the risk may be small—there is risk—such as a co-operative society must on principle be chary of incurring. There is this point to be considered. Collect as much agricultural produce produced by yourself, in conjunction with others, to be offered for sale, as you will—the assortment will still only remain restricted. Now, at the present time the popular tendency in sale trade is all in the direction of massing much together, varying the contents of a shop to the uttermost. It is—rightly—in production that specialisation is studied. The agricultural stores of Lyons and Milan have found themselves driven to supplementing their own goods, produced by their members or society, with other articles, bought expressly for resale, just to fill the shop and bring customers to the till. That in itself indicates a fault in the choice of a vocation made. These societies had got out of their proper province.

Take the following cases, which speak for themselves!

In *distributive* co-operation, in wine drinking countries, there is no article which sells better and more surely than wine. The cellarage provided in the great stores of Basel, Milan, Paris, Rome and Winterthur, keeps steadily

increasing. The *Unione Militare* of Rome used to gain so much on its wine—it may do so still—as to be able, out of such profit, earned in a great measure from non-member customers, to cheapen appreciably the price of accoutrements and other military requisites sold to officers who were members. In *productive* societies of vinegrowers and wine pressers, on the other hand, sale has been found a difficult process, often leading to loss—loss in some cases heavy. The *Vignerons Libres de Maraussan* who, like all French socialist co-operators, have given evidence of much practical sense, have done so more markedly in no respect than in that of entrusting the sale of their produce to a *distributive* society, the *Magasin de Gros* of Paris. That sells their wine easily.

Once more, co-operative slaughterhouses have proved very successful in the hands of *distributive* societies, at any rate in some characteristic cases—more particularly in sausage eating countries, where butchering becomes for the most part pork butchering. In the hands of societies of *producers* of meat, they have turned out dead failures.

Again, there is co-operative baking, which has been tried both as a productive and as a distributive process. We have magnificent co-operative bakeries in this island maintained by distributive societies on the *distributive* plan. They answer admirably. So do similar enterprises abroad. The bakery business of the wellknown *Vooruit* of Ghent has been the making of the great socialist co-operative society, run hard as it was by the oppositionist *Volksbelang*. And in France distributive co-operative bakeries are numerous and popular, more particularly in rural districts, remedying as they do at any rate to some extent the artificial appreciation of bread, so hard for poor people to bear, brought about by what M. Paul Leroy Beaulieu has termed the “insensate” (*insensé*) tariff.

Taken in hand by *producers*—this has been frequently tried in Germany—co-operative baking has proved anything but a success, almost invariably leading to loss.

A productive society should keep to its *crepida* of production and sale through what may be called the wholesale trade. That is what our masters in the matter, the Danish co-operative Egg, and Butter and Bacon societies do. That is what the Eastern Counties Co-operative Farmers and the Blairgowrie fruit growers do; and in both cases with distinct success. Their headquarters is, by telephone and telegraph, in communication with the various sale centres. Its expert officers know where to direct deliveries. By collecting and acting upon the advice received they avoid a glut and resulting depreciation. And their skilled agents sell their goods delivered, on the chosen spots, generally with admirable results. That is the proper way of proceeding. There is little—it may be said no—risk in this. It does not place the society of farmers in competition—in which, for not a few purposes, it must find itself overmatched—with skilled retail sellers. It supplies these and thereby propitiates them. And in consequence it profits by them. In the course of time we may hope to do a large business through our distributive societies, which are altogether in their proper province in selling retail. That may not absorb all our highest class articles. But it will go a long way. Thanks to the discipline which we are enabled to exercise over our individual producers, we hold in our hands a powerful instrument for commanding a sale at high prices. That is our “brand,” which, under proper conditions, guarantees quality such as we can enforce better than any one else. At the Paris *Halles* co-operative eggs habitually fetch a higher price than all others. In Hanover, which is in respect of Agricultural Co-operation the foremost province in Germany, the “brand” of the “Guelph Horse” ranks

as the most effective recommendation of agricultural produce of all kinds. The *Nederlandsch Boter Controle* and, even before its introduction, the "Dutch Bridge" sold butter so marked at top prices. In Belgium butter from co-operative dairies commonly sells at about 3d. more than *boerenboter*, coming from non-co-operative dairies. It is by our "brand," and that for which the "brand" stands, the guarantee of best produce, that, by the side of skilled direction to proper markets and expert dealing with re-sellers, we must attempt to conquer, not by the retail seller's apron and slate, which suit neither our rustic form nor our plough-hardened hands.

V.—CO-OPERATIVE DISPOSAL OF MILK.

There is no branch of Co-operation which has rendered more valuable service to Agriculture than Co-operative Dairying. And although, no doubt, its practice requires particular care and vigilance, it cannot be contended that its organisation presents more than ordinary difficulties. Nor is its utility at all near being exhausted—certainly not in this country, where as yet we stand only on the threshold of the movement.

A whole world, in truth, seems to lie between dairying of the present day and dairying of pre-co-operative times—when the milk was left in pans for the cream to rise, and the dairymaid's "neat hands" were trusted to turn out butter to pass muster in the market; when we judged the yielding capacity of cows by Guénon's "escutcheons," and looked to preparations like Tomlinson's "Butter powder" to obtain the maximum of butter-fat out of cream.

It is, in the main, the Centrifugal Cream Separator, of course, which has conjured up this remarkable transformation—the separator, coupled with technical education, with cheap ice and refrigerators, and a taste refined to fastidiousness among our consumers.

But all these things could not have exercised their full effect if we had not learnt that for their proper and profitable application quantity is required,¹⁰ which quantity is only to be secured by Co-operation;¹¹ and that even quantity will fail to produce them if there is not that vigilant oversight, that strict holding of every supplier to rigorous account which only Co-operation, with its

principle of "One for All, and All for One," will evoke. Under no other form of organisation could the same stern discipline be exercised ; under no other form would it be submitted to. It is the direct personal interest of all in the conduct of every one which enforces it.

The dairy to-day produces more money. The consequence is that more cows are kept, and that accordingly a distinctly remunerative branch of Agriculture—which was formerly almost allowed to languish as a mere by-industry—is being pushed, to the benefit both of the farm and the country. But that is not all. Co-operation applied to dairying, an industry in which its effects are very visible, is found to beget everywhere a taste for further Co-operation, with which the first readily allies itself. In the wake of dairying we see co-operative purchase, sale, work of every kind, starting up. The list of by-industries practised abroad in conjunction with dairying, and really "growing out of" it, is truly astonishing. And for one most important branch of such other Co-operation more in particular—that is Distribution, Store trading—the supply of milk and butter affords a most powerful help. If we want to extend Co-operative Distribution, accordingly, let us by all means push Co-operative Dairying ! With regard to this point, the history of the great Co-operative Store of Basel should be instructive.

That great Store, which is to-day one of the largest and most successful in the world, was practically built up upon the supply of good milk. In Basel, amid the fat vale meadows and the fragrant mountain pastures of Switzerland, the milk supplied was bad, because farmers had no inducement to supply it of better quality. The founders of the Store—mainly schoolmasters, that is, men of education and civilised tastes—with some trouble made provision for good milk. They contracted with farmers within a wide radius for milk which must be tested

and the housing, feeding, and treatment of the cattle producing which must be kept under strict observation, so as to insure a palatable and hygienic product. And all Basel at once came to the Store for its milk. And coming for milk it came also for other things.

There is, indeed, a reverse side to such action of the Store. But for this once more Co-operation was found to provide an effective remedy, such as, in a less forcible way, we have also seen applied with success in this country. The Basel Store oppressed the farmers who dealt with it. Having the whip hand of them, it cut down their prices below what was reasonable. It has been calculated that in this way it pocketed about £8,000 a year that was not due to it. Something of the same sort has happened more recently in Lancashire, and under the lead of Mr. Fitzherbert Brockholes the farmers have combined to meet oppression with revolt, which has led to an equitable revision of terms*. In Switzerland the Peasants' Confederation did the same thing on a much larger scale in challenging the Basel Store, and other consumers with it. There was serious war, which lasted some weeks and cost both sides substantial sacrifices. However, in the end the Peasants triumphed—and the Basel Store, paying now a reasonable price, is once more the largest consumer of the Peasants' milk. The Peasants' victory, achieved by combination over the Condensed Milk Factories, was even more signal. The factories were brought to their knees and forced to capitulate.

And a similar, brilliant victory has more recently been gained in the same country over the dealers in cheese, who had formed themselves into a "ring," by combined action among farmers producing the famed "Emmenthal" cheese (we call it Gruyère, but only the best brands are here referred to), whose co-operative society now sells such cheese directly to the importers elsewhere.

* A similar movement is now in progress in Cheshire.

It deserves to be noticed, as has been recorded in the *Oesterreichische Genossenschaftspresse*, that everywhere where milk suppliers have shown the grit to combine and stand out for terms, they have managed to obtain a fair price—a better price than others.

From these incidents farmers will be able to gather what large power for enforcing justice by combination they possess.

However, they ought at the same time to be warned that there are limits to such action. In Berlin it was the farmers—of a strongly agrarian persuasion—who, forming a “ring,” enforced an unduly high price. Naturally the consumers rebelled, and eventually carried the day.

The method of Co-operation here to be advocated is of a far more pacific character. There is no fighting in it, and none is needed. And yet it carries with it substantial profit and useful instruction. It is merely union in production, which, as in fighting, means strength.

The mere utility of collecting milk from many little herds for common working, so as to ensure economy, and, moreover, uniformity of product—which in itself is an asset—was not a difficult lesson to learn. The Swiss and the French of the Jura have practised it in a rudimentary fashion from very early times, probably since the thirteenth—or it may even be, the twelfth—century. The form of Co-operation then adopted was elementary indeed, and in many instances it remains so still. Originally it consisted in members taking their several turns at making cheese on their own farms, of the milk of all—since it was held that there must be milk from fifty or seventy cows at a time to make cheese-making worth the trouble—and distributing the finished product roughly in the same proportion in which the raw material had been contributed. Even in the present day it is not at all uncommon for members to deliver their milk by measure and receive

the cheese and whey back in the same proportion. Then people hit upon the plan, which is still not a little honoured in practice, of keeping a common cheese-making plant for the use of all in turn. There are some thousands of *fruitières* still on the Swiss and French mountain tops—about 1800 in France alone (there are others in the Pyrenees, worked on the same principle, and passing by the name of *cabanes* or *bavaques*)—and in very sooth the credit of having first organised co-operative dairying as we know it of right belongs to Switzerland. But it was not the old fashioned *fruitières* on the mountain tops which produced it, but the homesteads of the dales. It was in the village of Kiesen, near Berne, that in 1815 the first co-operative dairy of modern type—rudimentary as it was—was organised. And from that little village Co-operative Dairying has spread out over nearly all the world—in our own case filtering through the Danish churn. However, Denmark itself did not take up such dairying till more than sixty years later. To ourselves, superior nation that we are, it needed something more convincing than mere logic to bring the lesson of Co-operation home. It was the uniform, standardised butter coming to us, in quantities growing larger every year, from Denmark, and later from the Netherlands, cutting out our own, which taught us what good there is in Co-operative Dairying. The cream separator was then already in the field, ensuring the valuable but for a long time ignored benefit of separating cream, not only far more expeditiously and completely than the old pan, reducing the quantity of butterfat left in the residue to as little as one tenth per cent., and even less—for one-twentieth is on record—but also of separating the cream from the milk in its *fresh* state, so as to yield a fresher product. It is the quick operating, and the keeping the milk and cream cool at the proper time—and heating them at the proper time—

quite as much as the mere economy effected by operating upon a large quantity, that has brought about the remarkable improvement in butter-making, which, although we in England find that there is not as much money in it as in other forms of disposing of milk—in its unchurned state or as cheese—for the present still occupies a dominating position in dairying. And, whatever be its business aspect, Co-operation distinctly and appreciably improves butter-making by the perfecting of quality and the cheapening of production.

The subsequent refinements, outside the dairy proper, followed as a matter of course. Once farmers began to calculate, and to measure their milk, the suggestion rapidly forced itself upon them that it is more profitable to have a good cow than a bad one. "There is quite a rent between the yield of a good cow and a bad one." So stated Mr. Drysdale (Secretary of the Scottish Agricultural Organisation Society) in the Small Holdings Inquiry. The "Milk Register" crowded out Guénon's "escutcheons," and the tester supplemented the register. The advance made in the keeping of good milking cows, and eliminating bad ones, is really very considerable—elsewhere than in this country. From breed to keep, to feeding, housing, tending, was in each case only a step. The "Control" committees and societies—which are far more than the mere "milk testing" organisations, as which they are sometimes given out, in this country—brought the matter up to its proper level, teaching people how to utilise knowledge and make the same quantity of fodder and amount of manual labour go twice the old distance—which is a lesson that we have still to learn. That involved submission to inspection, to control, to regulation often minute. To read the "Directions" of a great modern dairy institution like the Co-operative Milk Supply Society of Copenhagen, or the *Dresdner*

Milchversorgungsanstalt, the most modern institution of its kind, one feels tempted to ask: What liberty is there left to a cow-keeper? He must not feed this or that or the other—not even brewer's grains and green tares, which we old stagers used to consider ideal fodder—he must submit to this and that restriction, cool his milk to the proper temperature before delivering, deliver in a regulation way; and failure to do so involves merciless rejection of his milk. No force except Co-operation could have rendered him so amenable. But as a set off we find that in Denmark co-operative creameries almost monopolise the dairy trade, multiplying and growing, and that their produce commands top prices. These are no fortuitous results. It is the man compelling himself through his society that makes so docile and willing a pupil of him. Control, dictation, discipline, all comes in a bearable shape when it comes from oneself.

Co-operative dairying, as observed, came originally from Switzerland, passing, like a caterpillar, through two phases. Switzerland, being a country of herds, turned out excellent manipulators of milk and cream—mainly for cheese, but also for butter—long before the excellent Dairy School of Rütli was set up. These men not unaccountably considered it worth while turning their skill to good account for their own profit; and in this way a semi-co-operative institution took its rise, which is still fairly represented in Switzerland—in societies in which Co-operation among cow-keepers is carried only to the point of collective delivery of milk to an expert cheese or butter maker, who deals with it further for his own profit. Such inchoate Co-operation is also known in France, where among other institutions, a famed creamery of Isigny practises it. A similar institution, not on co-operative lines, but greatly appreciated among owners of large estates, which has served directly and very effectively to

plane the way for co-operative dairying, has become very general in Germany. Many landed proprietors there used to conclude contracts with a "Swiss"—as the skilled dairyman came to be currently called (the French call him *fruitier*)—for the regular supply of all their milk except what might be required for their own farm or household, at a settled price, the proprietor setting up the buildings and supplying the plant. And with the same "Swiss" adjoining estate owners, farmers and peasantry would likewise contract for their milk at a fixed price. The proximity of a "Schweizer" (Swiss) came to be reckoned a distinct advantage to a property put up for sale and would in some degree influence its price. From Germany this same system spread into Denmark, among the owners of large estates. It is there still represented by the *Heeregaardsmejerier*. In this way was opinion prepared for the evolution which subsequently took place; and although there was no centrifugal cream separator yet in the field, dairying came to be studied as a branch of husbandry to be improved.

Meanwhile, we in England continued very backward. The "~~Milk~~ Journal," appearing about 1870—when the "Aylesbury Dairy Company" and the "Dairy Reform Company" had recently come upon the scene, with purer milk—and an article on "Town Milk" appearing in one of the Reviews, had momentarily fixed attention upon the subject and awakened interest. But the public mind did not really take the matter up till after the International Dairy Exhibition at Hamburg in 1877, when Professor Sheldon, by the light of what had been there exhibited and taught, urged it upon the agricultural world as a matter of importance. At that time the original Centrifugal Cream Separator had just come on the market, doing about a twentieth part of the work of what, in its more perfected form, the Alfa-Laval power separator

accomplishes now. The subject then came to be studied. The British Dairy Farmers' Association, formed in 1876, took up teaching work; technical education was entered upon; in the course of time Sir Th. Dyke Acland started his model dairy, which frequenters of the great Agricultural Shows of the eighties are likely to remember; and in this way improved dairying came to be placed under public observation. About the mid-eighties the first Lord Hampden (Speaker Brand) tried his hand at Glynde upon a "co-operative" dairy, rather of the old Swiss and German type than the modern. Of Canon Bagot's little experiment with "Irish" cream and butter there is scarcely any need to speak, though the Canon's glib tongue kept the matter well to the fore at the time.

While we were timidly groping our way, a great transformation had taken place in Danish Agriculture. In 1879 Prince Bismarck astonished the world by his proclamation of Protection as the German policy of the future, which "fiscal policy" he applied with such merciless severity as effectually to close German markets to what had up to then been the staple produce of the northern kingdom, that is, corn. Opportunely, in that very year, was a cream separator of modern and improved type exhibited at Berlin, which, acting like the rust on Achilles' spear, helped to heal the wound that that same Berlin had first struck. The first co-operative dairy in Denmark was opened in 1882. Repulsed by Germany, Danes brought their produce to us; and among ourselves, gourmets that we are, their improved butter met with a ready sale. Co-operative dairies accordingly increased rapidly in number. Denmark is in the main a country of small farms, and it was to their owners—in contradistinction to owners of large estates, employing their own "Swiss"—that the new movement appealed. Between 1886 and 1890 no fewer than 628 new co-operative dairies

were set up. By 1909 there were 1157, employing the milk of 154,568 holdings and 1,059,956 cows, that is, 86 per cent. of the total number of holdings in Denmark and 83 per cent. of the total number of cows, turning out among them about 100,000,000 kilos of butter (out of a total production of about 125,000,000 kilos in the kingdom), paying the suppliers of milk (2,620,000,000 kilos out of a total of 3,700,000,000 kilos, that is, more than three-fourths) 227,000,000 Danish crowns (about £12,611,111), in addition to about 23,000,000 crowns (£1,280,000) for whole milk. The storm conjured up by the Prussian Æolus had been well weathered. While Co-operative Dairying was rising up as on eagles' wings the number of large estate non-co-operative dairies, which in 1900 still stood at 264, had gone down to 90, and the number of semi-co-operative dairies (dairies worked in common, but not on co-operative lines), which are still maintained mainly in Jutland and in Lolland-Falster, from 266 to 238. It is mainly small holdings—85.9 per cent. of those up to 12½ acres, 88.9 per cent. of those up to 37½ acres, 90.7 per cent. of those up to 75 acres, and 87.9 per cent. of those under 150 acres—which are answerable for co-operative dairying, whereas the two other types recruit themselves mainly among holdings above 150 acres—the larger, non-co-operative dairies principally among such over 300 acres.

Such triumph of Co-operation, which, under our present aspect, decidedly made Denmark in this matter the premier country, by its own merits, soon came to act as an illuminating example to all the world. Sweden took up the co-operative practice with vigour and with admirable results. It may be called a country of "cows," for there is a cow there to every three inhabitants. And, since in 1910 it exported no less than 21,749,540 kilos of butter, of the value of about £2,000,000, into this

country—in addition to a considerable quantity got rid of to Germany—Danish example cannot be said to have remained unfruitful in the more northern kingdom, where, above all things, the “Control societies” have given brilliant evidence of their utility.

Next came the Dutch, who are avowedly pupils of the Danes—eminently docile pupils. Theirs likewise is a country “of cows.” Their peculiar breed of cattle, nourished on those fat green pastures which extend like a huge carpet, far as the eye can reach, between canals always dispensing freshness, has been long famed as a specifically milk yielding variety. The Dutch took up Co-operative Dairying—the financial results of which appealed strongly to their calculating mind—in their private independence, raising up *zuivelverenigingen*, which in due course they united into federations, with an All-Netherland Federation at the head of all. It is the several *verenigingen* or unions that test the butter and supply the “brand,” which has long since become a very valuable asset. They also introduced instructive butter shows and those most useful butter sales, at which producers and dealers meet, not merely as buyers and sellers, but as joint counsel-takers, examiners and appraisers. The results obtained however soon presented themselves to the Government as of so much national importance that, like the Bavarian Government in the matter of beer, it took up the supreme control—happily with similarly good results—placing skilled technical instructors, *zuivelconsulenten*, at the service of farmers, and supplying a brand “*Nederlandsch Botercontrole*,” which is recognised as a guarantee—working so well that there seems a probability of the same method (by means of a stamp) being applied also to cheese. The butter-shows with their two gradations—local and national—are found particularly useful.

Germany is likewise unquestionably a pupil of Denmark—having previously learned combined, as distinguished from “co-operative,” butter-making—from Switzerland. Its admirably comprehensive co-operative organisation, thus far not equalled anywhere, enabled it to extend the practice largely, so as to make it to occupy the first rank—with Austria following on similar lines—in such Co-operation. And the scientific turn of its national mind taught it to perfect machinery and methods until its installations and its creamery instruction undoubtedly came to stand first in the world—although, by a curious inconsistency (showing how insufficient even the most excellent methods are when unaccompanied by proper practice) its butter turned out is not, as so high an authority as Creamery Instructor Pittius has quite recently admitted, generally of as high a standard as the Danish.

Nor has Danish example been lost upon France, which now numbers about 700 co-operative dairies—besides about 1800 old-fashioned *fruitières*. Such dairies are particularly well represented in the two Charentes and in Poitou, where the movement has taken firm root.

All tills co-operative dairying has thus far consisted in the main of butter making, with cheese making following as a good second. Co-operation being in the first instance intended for the utilisation of produce at a distance from markets, it is no more than natural that the products selected for sale should have been the most portable, compact and durable that there are. Switzerland led with cheese—its peculiar native product, which up to recent times, more particularly in the sixties and seventies, commanded a high price. Of late its old Midas touch has forsaken it and, like dairying elsewhere, Swiss is accordingly seeking outlets in other directions. Denmark and Sweden produced butter—with a little cheese, mainly for exportation into Germany, where “thin milk cheese”

(*Magermilchkäse*), the making of which does not interfere with buttermaking, is much prized. The Netherlands likewise have gone on manufacturing their "Gouda," and "Edam," not to speak of the sweet scented "Limburg," which types continue to hold their own in the market. And Germany made butter, with a fair quantity of "soft" cheese of the creamy kind to supply a growing taste for such delicacy; and also curds (*Quark*, in French *caillebotte*), made of separated milk, which enters largely into German cooking and baking, and is to some extent converted into cheese.

In course of time however such one-article dairying came to discover a seamy side—to which also a recent writer in the "Journal of the Board of Agriculture," describing the Skelldale Dairy in Yorkshire, has called attention. All butter-making did not in every instance any longer pay quite as it should. The matter has been inquired into in Denmark and it has been found that following the vogue in making butter is not everywhere sufficiently remunerative.

Parenthetically it may be here observed that another graver defect was detected at the same time, of which we have heard rumours also in Ireland. It does not directly affect us in our present connection. But it distinctly wants calling attention to. Some farmers, finding a new, remunerative market, which previously they knew not, opened to them for butter, took to starving their children and their growing calves for the sake of their purses, either substituting margarine for butter for home consumption, or else substituting nothing at all—distinctly so in the case of the calves, whose rations of butterfat should at any rate have been made up for by other fatty matter. A Danish official Report, published in 1910, emphasizes the fact that between 1888 and 1908 the consumption of margarine went up in Denmark from two million to twenty-

nine million kilos, and attributes the remarkable concurrent increase in the exportation of butter during that time to this cause. The consequence was a falling off in the physique—more particularly in the production of bone—both in children and in growing cattle.

This might not have affected the buttermaking farmer. But the suggestion of a falling off in profits distinctly did. And there were pastures new to tempt him on hitherto untrodden tracks. Thus far the sale of new milk and cream had been left to small dealers and farmers favourably situated for supplying a private clientèle by means of their carts. The appearance of large Joint Stock Companies, like the Aylesbury Dairy Company, on the scene was a suggestive innovation. But there was also another influence brought to bear, the presence of which has already been called attention to in connection with the Basel Store. Consumers of milk grew squeamish in their taste. Like the consumers of butter, they wanted a uniform product, and a product of guaranteed quality, sweet and hygienically sound. There were ugly rumours about of the spread of tuberculosis by milk. And Professor Ostertag, a great authority in Germany, has shown that tuberculous milk from one cow—more particularly if the tuberculosis be that of the udder—will, if mixed with it, contaminate the milk of “hundreds” of sound cows, so as to make it dangerously tuberculous. Now careful treatment of milk, accompanied by testing and proper cooling and heating, inspection of herds, sound feeding, and so on, will produce milk of the quality required. But it can only be so produced in large quantities, such as justify the outlay upon machinery, the employment of skilled labour and whatever else is needed. These prerequisites clearly indicate Co-operation as the proper method to practise. To many among the public Co-operation appeared under such point

of view safer than Joint Stock management. For there is more likelihood in a co-operative society of things being well looked into. There is likely to be more publicity and control; and, on the face of things, the object of a co-operative society must be rather to secure, by conscientious dealing, a permanent than, for the sake of present profit, a temporarily inflated market. Accordingly dairying for the sale of milk and cream—and by-products, such as *joghurt* (sour milk similar to Professor Metchnikoff's), *kefir* (fermented milk similar to *koumiss* and most digestible) and *caseine* (in Sweden, intended for use in cooking in that country and in Germany, and of late also in France)—has come to take a recognised place by the side of butter-making and cheese-making. And there are some excellent establishments to serve as models for imitation, answering well and approved of by their customers. It is sufficient here to mention two, one at Copenhagen, the other at Dresden. Co-operative dairying has, in Germany, even pushed its way into the manufacture of condensed milk. Wherever circumstances are favourable for the sale of milk, that has proved a good business.

In the United Kingdom we are beholden to the quick-witted Irish and to the cluster of their deserving leaders, headed by Sir Horace Plunkett, for such little co-operative dairying as we at present can boast of. What we possess in England makes a poor show indeed beside the 3,500 or so of co-operative dairies in Germany, the 2,000 or so of Switzerland, the 1,200 of Denmark, the 700 of France and even the 400 of Finland. For we possess as yet only about a score—to about 400 already established and flourishing in Ireland. The Irish, pasturing people that they are, were driven into the adoption of co-operative dairying by severe competition. Their trade was being crowded out, in spite of Canon Bagot, by Danish importation. It was our old enemies, destined in after-time

to become our friends—the countrymen of conquering Canute, and of Hengist and Horsa (for Professor Weiland has conclusively traced the home of our Anglo-Saxon invaders to present Frisia)—who by a second, peaceable invasion, with improved butter, forced the change upon them. “A hair of the same dog” would cure the mischief that the first hair had wrought. Under Danish—and lately Dutch—tuition Ireland has made a rapid advance, and though its cows do not yet by any means yield as do the Danish or the Dutch, and though their handling is not always as careful as it might be, they have now in general no points to ask for in a trial of skill from either of their foreign competitors. If only the difficulty of winter dairying could be got over—which undoubtedly presents greater difficulties in a pasturing country than it does in a stall feeding, but which is not insuperable—the further progress of Irish dairying would seem assured. For in Ireland the price obtained for milk in the shape of butter is still, as for the most part it is in Denmark, recognised as remunerative.

We may now proceed to a consideration of the requirements of a co-operative dairy and the conditions under which such may be expected to thrive, leaving for the moment the selection of the particular form of employing the milk collected out of sight.

This is, as has been insisted upon in the preface, not the place for entering into the minutiae of technical dairy management, for which there are other guides, but merely for discussing the conditions which go to justify the formation of co-operative dairy societies and to insure their success. The cardinal points among such conditions are a regular sufficient supply of the raw material and the possession and retention of a favourable and trustworthy market. Such market is to be secured by uniform good quality and a steady supply.

The "sufficient supply" stipulated for is to be secured by the presence of an adequately large number of cows and a binding obligation laid upon members to deliver regularly all the milk which such cows produce, except whatever may be required for use in their own homes and on their farms, during a fixed and sufficiently extended period. Alike Danes, Germans and Dutch lay great stress upon such obligation, the Danes extending the period of its duration in many cases to fifteen years and more, although under certain circumstances they are content with only two years. Whatever be the particular term agreed upon, an obligation of the kind indicated there will have to be, or the society may be left altogether "in the air," with a costly plant and buildings on its hands and no use for them. Even under a binding obligation there remain some points of uncertainty to take into account, one of which—already alluded to—makes itself rather unpleasantly felt among ourselves, viz., the difference between the supply of milk in summer and in winter. Apart from this, and from the danger ever present of the disqualification of milk by disease, members may increase or else reduce their herds, and so produce either plethora or want. That danger is not indeed seriously menacing. For given holdings are likely at all times to require approximately the same number of live stock. And the results of co-operative dairying should be such as not to favour any disposition to reduce it. The falling off of supply in winter is a more serious matter and may form a telling hindrance in marketing. For consumers want to have their milk and butter supplied all the year round, in winter as well as in summer. In countries where there is stallfeeding the question raises no difficulty; for the difference between summer and winter yield is there much less pronounced. The period of calving may easily be arranged so as to meet requirements. And the inclement

season does not affect cows within the warm byre. Apart from timing the period of calving, this is a question also of shelter and of the provision of additional food. The more nearly summer and winter yield can be brought to approximate, the better will the chances be for the command of a good market.

But co-operative creameries or dairies should not be too small. There is a movement at the present time very pronounced in Germany—wherever buttermaking is the form of dairying practised—for bringing down dairies to a lower level in respect of members—which tendency is in marked contrast with a movement equally pronounced in progress in Sweden in the opposite direction, that is, of amalgamating dairies for the sake of arriving at largeness. So far as local conditions permit—there must be a certain limit of distance observed, or delivery will be rendered inconveniently onerous—there can be no doubt that the Swedish farmers are the wiser of the two sets of people. And this is frankly admitted by experts among the Germans themselves. It stands to reason. Butter of superior quality can be cheaply produced only in considerable quantity. There must be a plant capable of converting large quantities. Such plant, costing a fair sum of money, wants to be fully employed if it is to pay its expenses. There must also be “power” to work the separator, the pumps, the churns and other machinery. All these things are to be ensured, as the long-headed Swedes clearly perceive, by accumulation of as much raw material as conditions will warrant. The Germans are no less long-headed, perhaps; but they grudge the trouble of delivery, which is indeed the great hitch in the whole process. Dairies began by looking to members to deliver their own milk in their own carts or barrows, and to come again in the same way for the separated milk—which, as a rule, they want for their calves and their pigs, for the

making of creamless cheese, and, it may be, for consumption in their homes. Such delivery can take place only within a very small district. Where arrangements are fully perfected and where there is a good railway service—if possible, as is the case in Denmark, Sweden and the Netherlands, with cold water tanks or refrigerator waggons, to keep the milk (or butter) cool (temperature is of great moment in dairying)—a tolerably wide radius may be covered. Thus the *Dresdner Milchversorgungsanstalt*, which deals mainly in milk, receives milk from a distance extending to 50 kilometers, equal to about 31 miles. Even longer distances are not unfrequent, such as 50 miles. And so long as due provision is made for the avoidance of churning and other deterioration on the road, and the railway communications are sufficiently good, distance need not stand in the way. For ordinary purposes, where milk has to be moved by cart, or by hand, however, a radius of five miles is found in practice to be a desirable limit. The better plan by far—coming from day to day more widely into use—is that of making the society collect the whole milk and return the separated, in carts either owned by itself or else hired by contract, certainly on its own account—for which service of course a certain remuneration must be charged, which in Denmark ranges, according to the distance and the conditions of the case, from a little under $\frac{1}{2}$ d. to about $1\frac{1}{2}$ d. per 100 lbs. of milk. In Denmark, where, thanks to the High Schools, rural morals stand high, this arrangement simplifies collection exceedingly. For farmers just leave their cans of milk at fixed known points by the roadside, where the collecting cart regularly picks them up. And to the same points they send at stated times for the return cans now containing the “skim” or, more correctly speaking, the “separated” milk. We can scarcely in this country aspire to the same idyllic simplicity. But wherever particular farms cannot

be called at, we can ask farmers to arrange among themselves for the selection of convenient recognised local collecting centres, to which—the distance being short—they may deliver their milk. In Germany, as observed, some farmers grudge both trouble and the small payment for collection; and accordingly—under the seductive persuasion of makers of small plants; that appears to be in many cases the main deciding reason—split off from their large societies and set up small, with hand separators only, in greater vicinity, or else revert to the old practice of home churning—using a hand-separator. By such secession they lose the advantage not only of uniformity of product, but also of economy of labour and an independent position in the market. And it is only likely that in the course of time they will have to return to making on a larger scale. Their secession from large societies, by the way, supplies an additional argument in favour of binding members to deliver for an extended period.

The same difficulty which has caused German farmers to split off from their societies has suggested other methods for overcoming the trouble of delivering at a distance. One has been to deliver, not milk, but cream, being a less bulky product, and keeping the separated milk at home. That means separating at home by handpower. This practice is very common in Sweden, where there are special "cream dairies" (*Gräddemejerier*) and where it is said to answer well. One potent argument, there put forward in its justification is that it enables Swedish farmers—who receive in their own country only a very moderate price for their milk, namely, something like 7 öere the litre—to export their cream into Germany, as an alternative to exporting butter, upon which the Germans levy a heavy duty, of 10s. per cwt., whereas cream passes in free. In Germany, on the other hand, this method has not answered at all. The difficulty about delivery

so much complained of does not lie in the quantity, but in the sending, which is not so got over. Delivering cream involves keeping more plant at home, far more frequent testing at the creamery—in the case of milk one testing a week is as a rule found sufficient—and double accounts. It is not at all applicable to small lots of milk, which is a decided objection from our point of view, but practically restricted to delivery from large farms. Accordingly in Germany the practice is being abandoned almost as fast as it is taken up.

The best remedy for long distance is that which—treading in foreign footsteps—co-operators have adopted in Ireland, namely, of setting up auxiliary creameries, acting each for a comparatively circumscribed district, and either sending up the cream (after separating) to the principal establishment, to be there ripened, churned and sold, or else making the butter themselves and sending up the finished product—to be there, so it should be suggested, blended with the other butter for the sake of uniformity. That is, by the way, what is done with apparent advantage among the societies composing the *zuivelvereeniging* of Drenthe, in the Netherlands; that has also been found advantageous in South Wales, during the time that it was there practised. Co-operating farmers there delivered their butter to the depôt of the Co-operative Wholesale Society, which thoroughly mixed it up and was enabled to pay the farmers a better price than they could obtain otherwise.

Farmers may of course also do the blending for themselves. That is in fact the most elementary form of co-operating for dairy purposes and quite suitable for small holders. The object is to reduce the expense of sale by acting in common, and to produce a uniform product. There is no denying the simplicity of the process. However in proportion to the simplicity the

benefits of such Co-operation threaten to prove small in comparison with more systematic organisation, all the more that the steady uniformity of the product can under such circumstances never be fully guaranteed.

No fixed rule can, of course, be laid down for the number of cows to be attached to a creamery. Up to a certain point such number will have to be determined by the proximity of the farms. For, by way of an auxiliary creamery or otherwise, one great desideratum will be that the establishment should be readily accessible to all its suppliers, just as, on the other hand, it is most desirable that it should command ready access to its market. The ability to deliver promptly at the right time—for the ascertainment of which, and of the right spot, the telegraph and telephone are freely impressed—is one of the helps that the Danes are greatly indebted to for their brilliant success in co-operative dairying. They are in constant communication by wire with the British markets and by telephone among themselves. Every turn in the market can be taken advantage of, and equal distribution to the several markets can be studied to perfection. The facilities recently given in this country for a telephone service in country districts ought to benefit our coming Co-operative Dairying not a little, provided that we adopt the same method of centralisation, so as to focus observation and admit of a proper marshalling of our forces.

The site will have to be selected accordingly. And it may be well to point out at the same time that it should be provided with good, pure water. For although there must of course be no diluting, and the noted "Mrs. Simpson" must be rigorously kept out of the tanks and pipes, the milk operated upon will come into quite sufficient contact with water to make it carry off contamination, if the water be not pure.

In Denmark the average number of cows attached to a creamery is about 800—which of course means that there are many larger. The smallest number favoured is 200—which is just the figure recommended as minimum for an auxiliary creamery by the Irish Agricultural Organisation Society.

It is not by any means indispensable that all members of the Society should also be suppliers of milk. More than any other form of co-operative society—except Raiffeisen village banks—may creameries depend upon capital contributed by non-producers. In Denmark it is quite usual for a creamery to be started without share capital. The money required is easily obtained, at moderate interest, from some bank, on the security of the unlimited liability of members, coupled with—this is essential—binding contracts concluded with them to contribute all their milk for a long period. That in part explains the store set upon such contracts. Almost precisely the same system of borrowing prevails in the Netherlands. Something similar holds good in France, where members' undertaking to supply milk is accepted as a most pledgable security. And in Germany it is quite common for co-operative dairies to be set up with capital borrowed from a co-operative credit society, such money to be paid off, instalment by instalment, not at so much a year, but at so much per gallon of milk used. We ourselves are not likely to organise societies in quite the same way in this country. But where money is scarce, since dairy business is steady and may be depended upon, well-wishers to the movement, content with a small return for their cash, might well invest in dairy shares, on which of course only the regulation dividend, limited to a moderate figure, could be allowed. The "dividend" in the co-operative sense, that is, the distributable share in the over-plus netted, will in justice go to the producers

of milk, from whom it will, in truth, have been first held back, in proportion to their supplies. A co-operative dairy, owning buildings and plant, is also a very proper institution to issue debentures. And, lastly, under the expanding close relations between agricultural productive and industrial distributive societies, one may almost anticipate that, as co-operative dairies grow more numerous, distributive societies buying their produce from them will take shares in them, or else debentures, just as they do already in industrial productive societies with which they are in business relations.

Barring the inspecting and advising action of the "Control Societies" still to be spoken of—or "Control Committees," for there is no absolute need for the formation of distinct societies—we have now done with what happens before the milk is brought to the dairy, except to add that it should be carefully strained and cooled down to about 53 or 54° F.—some creameries allow 60° F., but the last International Dairy Congress recommended 50° F.—and that of course none but healthy milk should be accepted. The milk of animals suspected of disease, "red" milk, milk within a fortnight or so after calving, and any other milk with danger or unsavouriness about it, will have to be rigorously excluded by the rules, and it is the business of the "Control Committee"—and also of the veterinary officers and the technical experts in the dairy—to see that these provisions are carried out.

Coming now within the dairy—as regards those technical experts, there should be no disposition to stint expense upon them. If there is "a whole rent between a good cow and a bad," as has been said, there is no less difference between a capable manager and an incapable. We in fact require two kinds of expert skill in a creamery—expertness in the handling of milk, and commercial expertness in marketing the product. That is an ad-

ditional argument in favour of large dairies, which alone will bear the expense of, not only a perfected plant, but also of good technical and business management.

Milk coming into a creamery will have to be tested and its temperature will have to be taken. The test recommended by the last International Dairy Congress, meeting at Stockholm, for making sure that the milk is new and in good condition, is that of equal parts of milk and of spirit containing 70 per cent. of alcohol, shaken up together and then allowed to stand. Milk so treated should not under such process become clotted or coagulate within 36 hours. The test for butterfat—the percentage of which of course determines the price to be allowed for the milk—and also for impurities (other than visible admixtures) need not be taken quite so frequently. Once a week will probably be sufficient, in ordinary cases—except in the case of cream. It is becoming usual to deliver by weight rather than by measure. But this is not so material a point as is sometimes made out. Our Eastern Counties Dairy Farmers contend that it supplies an additional test for quality, inasmuch as milk with the proper percentage of butterfat should have an ascertainable specific weight, above that of water. That consideration however, scarcely arises under our present aspect; because the percentage of butterfat will, in any case, have to be taken, as determining the commercial value of the milk. The separated milk as a rule goes back to the suppliers of the milk, often enough without apparent charge, the value having been allowed for in the price paid for the whole milk. That price, to be paid down—best in monthly reckonings, for farmers cannot wait long—is often advisedly taken at a little less than that obtainable in the market. For instance, if it requires 25 lb. of milk say, with 3 % butterfat, to make 1 lb. of butter the figure at first set down will be 28 or 29 lbs. That

leaves a balance for the working and for a dividend on production at the end of the year. Business arrangements should be framed on the safe side, and account-keeping should also be business-like and clear.

In respect of technical management there can be no more mistaken policy than leniency with suppliers. The success of the entire enterprise depends upon quality, and in stretching a point to one man the manager would be inflicting serious damage upon all other members. For it takes very little impurity or contaminated milk to spoil a large quantity. In this respect co-operative organisation perhaps stands better than non-co-operative commercial firms, because it can apply stern discipline. Aggrieved members in any case have their remedy against officers suspected of arbitrary conduct, in the appeal permitted to a tribunal of which they themselves are a constituent part. In some cases, where the scale of operations admits of it, and where the product requires particularly careful handling, it may not be amiss to employ a bacteriological expert and to subject the milk to bacteriological examination. Public knowledge of such fact may be relied upon to ensure a more ready sale for the article sold, and is therefore likely to make for a better price. Where not only butter or cheese is dealt in, but also milk and cream, the bacteriological department here suggested will enable the dairy the better to turn out special kinds of milk, under medical prescription; such as milk for the nursery and for invalids, for which there is a growing demand. However these are refinements which probably in Great Britain go beyond the need of the hour.

- There is, as already observed, no call here to go into the technical details of butter and cheese making. No matter whether the product be butter or cheese, it must be a natural object for the society to turn out an article

of sound and steady quality which itself—or, preferably, the Federation of which it should form a part—can conscientiously recommend to the market, with a brand or stamp, such as will soon enough become known to the public, and the use of which—as translated into the money which it will earn—constitutes the main visible gain that farmers derive from their co-operative organisation. It is like the stamp on the guinea. It does not make the article which bears it intrinsically more valuable, but it makes it to pass current with the merchant. By no means let Federations permit its use carelessly! That might cost them their reputation and whittle away all the benefit to be looked for from Co-operation.

It has become usual—except in some societies which supply milk direct from the farm—to pasteurise all milk used, whether for sale as butter or in its natural shape. There is safety in this and it satisfies a public fancy. In Denmark it is made obligatory by law. But expert opinion is by no means wholly at one upon its value. In pasteurising care should be taken not to “boil,” which imparts a peculiar and not altogether pleasant taste to the finished product. German creameries pasteurise at 154° or 155° F., after which they cool down successively, first, to 95° F., and then to $37\frac{1}{2}^{\circ}$ F. In Ireland the temperature favoured appears to be 160° to 170° F. Pasteurising of necessity entails in butter-making the use of “starters” to produce the requisite lactic fermentation, the bacteria for evoking which are destroyed in the heating. Such “starters” may be manufactured at home; but it will be much safer to procure them by purchase from a source which can guarantee pure “cultures.”

A brief word is due to the famed “Control Societies” quite without warrant frequently spoken of in this country as merely “milk testing” societies. Such societies constitute a very essential feature in Co-operative Dairying,

such as is dispensed with—as we have seen in Ireland up to quite recently—only at a loss. No doubt “milk measuring” and “milk testing” are items of the desired “control.” However, that is a matter of very old standing. I remember measuring milk fifty-five years ago on the farm on which I was then a pupil, and testing with an old-fashioned galactometer at stated periods; and the owner of the farm was to be trusted to take good care to get rid of the cows with poor records. But to-day “control” goes a great deal beyond this elementary point and makes of the “controllers”—some of whom are women—in very truth “guides, philosophers and friends” to small cow-keepers, as well as rather stern watchers, inspecting beasts, byres and fields, and going into a multitude of details in the interest of the production of good, sound milk. Skilled as they are, they advise how to feed and how to tend cattle, how to deal with the milk, what animals to keep, and what to get rid of, how to mate cows, what rotation to observe in cropping, and all such things. Their most useful services—which in themselves amount to a course of technical agricultural training in its most practical and home-going form—are supplemented by those of the veterinary surgeon.

“Control” of this kind was adopted in Switzerland, in connection with Baron Wattenwiel’s admirable “Live Stock Improvement Societies.” The remarkable improvement which it brought about in the value and yield of herds is pointed out elsewhere. The Danes took it up with their characteristic practical sense and energy, in the first instance likewise in the interest of Live Stock Improvement Societies. And to the present day, of the 519 “Control Societies” existing in Denmark (in 1909), one half continue specifically attached to such societies. Of the remainder about 200 are federated in unions of their own. Benefiting largely by such service, Denmark

in due course set the example to all surrounding countries—Sweden, Germany, the Netherlands, Austria. In Sweden, within the short period between 1901 and 1902, and 1904 and 1905, "Control" increased the yield per cow from 3,134 to 3,539 lbs., and the proportion of butterfat from 3.21 to 3.24 per cent. while at the same time reducing the fodder given from 155 lbs. (reckoned in "feeding units") to only 135 lbs., which involved a considerable saving in money. Denmark at the present time possesses, as observed, more than 500 Control societies, which, among them, inspect 206,800 cows, that is, 18 per cent. of the entire number of cows in the kingdom, the average yield of which, ascertained to be 3080 kilos p.a., compares favourably with the 2660 kilos yielded on an average by an uninspected cow.

In the Netherlands, where "Control" was adopted in 1900, it has since taken a twofold shape. There is "milk control," or milk testing, which does not go beyond the point indicated in the name, milk testing societies being formed by from 10 to 12 farmers each, who employ a common tester, required to measure and test the milk of their cows at least once a fortnight. Besides this there is the "Butter Control," practised, with Government assistance, at eight stations, to test butter for admission to the use of the common "brand."

We, in the United Kingdom, have at present scarcely anything of the sort—although a comparison between the yields of cows here and elsewhere shows that we badly need it. In the South-west of Scotland some few farmers have combined to societies, formed on the Dutch model, consisting of from 12 to 18 members each, to have the milk of their cows measured and tested for butterfat, as I measured and tested it 55 years ago, by young men trained at the dairy School at Kilmarnock, who come for the evening's milking and remain till the following

morning.* And in Ireland the Irish Agricultural Organisation Society has quite recently approved a "Control Scheme," of the results of which it is too early to speak. However, in respect of no point have we greater need to take a leaf out of the Danish book. And, even if in its first stage our "control" should have to be supported by outside assistance, it ought to be adopted.

What has thus far been said has advisedly been made to apply to co-operative dairying generally, without reference to any distinct product to be turned out, although there has very naturally been something of a presumption in favour of butter-making, which is, as already observed, still most generally looked upon as the normal utilisation of milk. The object with which co-operative dairying was originally taken up was to produce an article which could be made to travel long journeys and keep a moderate length of time, so as to be marketable at a distance. And, except in distinct cheese districts, butter was by a sort of accepted prescription regarded as such "article." However, from a specifically English point of view, butter has to some extent ceased to be a fully remunerative product—fully remunerative, at any rate, where other forms, under which to present the most saleable "product of the cow" to the public, are available. It has become something of a habit in England to run down butter-making as not yielding an equally good return as either the sale of milk in its natural shape or else cheese-making, although cheaper production is believed to make it very well worth maintaining in Ireland and in Denmark. It is, however, not by any means certain that in Denmark, likewise, the limit of remunerativeness has not in some instances already been overpassed. Those who disparage butter-making for this country, however, appear to overlook two rather noteworthy facts. There are places in which the sale of milk is not practicable and

*This practice is reported to have been now much extended.

which are not suited to cheesemaking; and furthermore the co-operative methods not yet tried in England are likely to do not a little both to reduce cost of production and increase price of sale, so as to make up the deficiency in remunerativeness now complained of.

However, undoubtedly, the other two methods of disposing of milk have much to recommend them, wherever they are practicable.

To speak of cheese-making first, as the most direct competitor to butter-making—inasmuch as it provides a readily marketable commodity occupying comparatively small space and that will keep—unquestionably where the cheese produced is of good marketable quality, there is at present more “money in it” than there is in butter-making; and we have, in fact, capital results on record as resulting from co-operative cheese-making by societies affiliated to the Agricultural Organisation Society, more specifically in Derbyshire, but also at Gillingham in Dorset and at the Scaford Dairy (Melton Mowbray), which manufactures “Stilton” cheese to the tune of about 5,000 cheeses a year. The Eastern Counties Dairy Farmers’ Co-operative Society also appropriates a considerable quantity of milk during the season of greatest abundance, that is, during May and June, to cheese-making. In 1909 the quantity so employed was 11,223 gallons, in addition to 2,882 gallons coming from the Essex County Education Committee, in connection with the dairy class at Chelmsford. Co-operative cheese-making is likewise on the increase in the Netherlands, on the same ground. So much, in fact, is its value appreciated in that country, that a special Government “brand” is in contemplation, to facilitate the sale of cheese, as the stamp *Nederlandsche Botercontrole* has facilitated the sale of butter. In Germany it is rather the soft fancy cheeses, now so much in vogue, being imitations of Camembert,

Brie, Neufchatel, and the like, that find favour with co-operative dairies, in addition to that popular article of German cuisine and baking, curds (*Quark*). However, there are two points that want to be borne in mind, in respect of cheese-making. The first is that cheese has its good periods and its bad. In Switzerland there was a roaring trade done in Gruyère in the sixties and seventies, when Gruyère was in fashion. Then came a time when profits fell off so severely that, avowedly to provide a substitute—as will still be shown—Baron Wattenwiel hit upon the happy idea of organising Co-operative Live Stock Improvement Associations. At the present time it is understood to be only the best known brands of Emmenthal cheese which fetch really remunerative prices. The second point is this, that cheese-making cannot stand by itself. It is practicable only during a limited part of the year. During that time it is in this country a paying business in cheese districts. And it is most accommodating in making that period coincide with a season in which there is as a rule a superabundance of milk, depressing the price. Relieving the market at such time, and leaving it free for milk at others, it accordingly forms an ideal supplement to the sale of milk, where such is practicable. With respect to butter-making its accommodatingness is not quite so marked, though it is not absent. For what applies to abundance of milk applies also to butter. Only in the butter trade there is found to be great virtue in continuity of supply. Certainly the co-operative organisation of cheese-making presents no difficulties whatever. Switzerland and the Netherlands supply evidence of this, not to mention our own Derbyshire. And there is very good reason why our co-operating cow-keepers should in suitable districts turn their attention to it a great deal more than they have hitherto done.

However the great future of co-operative dairying appears now to lie in the supply of populous places with new milk of superior quality, capable of being guaranteed—coupled with the sale of cream and of such by-products as have already been mentioned, so far as the public may take to them. The public value a supply of sound, sweet, hygienic milk. The remarkable effect of providing such a supply has already been shown in the case of Basel. And the “faculty” rightly do their best to develop such fastidious taste—which is not really all fastidiousness, because medicine has not a little to say to the matter, and medical directions for the preparation of nursery and invalids’ milk are becoming more and more numerous.

Sale of milk on co-operative lines, that is, comprehending large quantities, is practicable in two ways. Where there is plenty of custom, and where people continue content—as we all were a little while ago—with milk fresh from the cow, the method adopted by the Eastern Counties Dairy Farmers’ Society has much to recommend it, by reason of its simplicity and easy working. That Society’s district lies within easy reach of the East of London and, under its standing arrangements with a number of dealers in Stratford, and also with its own representatives in the same locality, its members supply daily a considerable quantity of new milk to the eastern suburb. Every member delivers for himself, straight from his farm, to some particular dealer, carrying his milk to the nearest railway station as directed by the Society. The only obligations laid upon him are that he should deliver good natural milk, strained and cooled down to 60° F. His contract, as usual in milk bargains, recognises a “margin.” That is, it is made out, say for from 95 to 105 gallons, in the place of 100. He is expected to notify the dealer if he will deliver the smaller

or the larger quantity. Should he deliver less than 95 gallons, the dealer will then make up the balance at his cost, charging for it $\frac{1}{2}$ d. above contract price. Should he deliver more than 105 gallons, the dealer will get rid of the overplus to his credit, at whatever it will fetch, minus a commission. Any overplus on the day's total delivery remaining unsold the Society's representative will collect and carry to the Society's depôt, to be there pasteurised and either bottled for sale or converted into butter. There is a regular butter-making plant at the depôt. Under such treatment farmers are said to realise from 1d. to 2d. more for their milk, i.e., 1s. 4d. instead of 1s. 2d. per gallon in summer, and 1s. 8d. instead of 1s. 7d. in winter.

Where people are more squeamish in their taste, or medicinally particular in their demands, a far more complex method has to be adopted. But that method pays, and is at the same time beneficial to its district, as may be judged from the results of the Copenhagen and the Dresden "Milk Supply Societies," among others. The Dresden Establishment, set up only three years ago, is the more modern and up-to-date of the two. It receives a considerable quantity of milk from a district with a perimeter, as has been stated, of about 50 kilometers, and has nearly trebled that quantity in the two years of its existence. Every care is taken to deliver only the best quality of whatever is sold, and the appliances used are all such as to admit of the most scrupulous cleanliness. Thus the pipes and tubes take to pieces, so that every "elbow" in them may be thoroughly cleaned every day. Steam and brushes are in fact kept busy everywhere, cleaning everything. The milk received—at midnight, at a temperature of at most 54° F.—is carefully examined, tested at once with alcohol, and once a week for butter-fat. It is passed through nicked pipes of steel into two several reservoirs on the upper floor—the one for butter-

making, the other for sale as milk. The sale of milk is the main business, as being the most profitable. It is only the milk not to be so disposed of which is converted into butter. However the quantity to be so dealt with is sufficiently well known beforehand to admit of a division. There is also a considerable quantity of separated milk—such as there is no demand for in its natural state by members—converted into curds, which are treated in a separate room lighted by blue glass windows, to keep the flies off. The milk destined to be sold as milk passes from the upper reservoir through a “cleaning separator,” to remove impurities, after which it is pasteurised at $154\frac{1}{2}^{\circ}$ F. (that is, 68° centigrade), and afterwards cooled down in two refrigerators, first to 94° F., and next to 37 or 38° F. (with the aid of salt water kept outside the lower part of the refrigerator at 23° F.). It is then filled into bottles or jugs and carted away to the branch depôts, where it is sold in retail. Retail trade of course makes the business more profitable. At Berlin, such milk is now sold at all the principal railway stations and in booths at various points in the town; and a good deal is consumed in hot weather. The milk intended for butter is first heated up to 86° to 95° F., afterwards separated, and the cream is at once pasteurised at 149° F., cooled down to about 37° F., then run through pipes into the ripening room, where it is treated with “starters” (obtained from Kiel), eventually churned and treated in the ordinary way for sale, never a human hand touching it during the whole process. The separated milk is likewise pasteurised, cooled down and sold in bottles.

The question has repeatedly been asked, whether a more profitable use cannot be made of separated milk than by returning it to members or selling it for feeding purposes. Various other employments have been tried in Germany. Separated milk has been sold in somewhat

considerable quantities for the production of patent articles such as sanatozen, plasmon preparations, or galalite, also for the manufacture of margarine, and likewise for the preparation of milk sugar and caseine. In Saxony it has been found profitable to employ it for the manufacture of condensed milk. But, otherwise, experts have come to the conclusion that the use of separated milk for feeding purposes is by far the most advisable, as yielding the best return in the long run, and in a steady way.

The Dresden Society does a great deal to cultivate the good graces of the "faculty," which accordingly favours and recommends it. It maintains a bacteriological department of its own, with a laboratory, both being presided over by a skilled "sister," who also delivers lectures, which are well attended by farmers and intending dairymen and women—including direct competitors, who are not turned back, because the lectures are considered a matter of public utility. With the help of this department scrupulous justice is done to medical prescriptions for nursery and invalids' milk, as well as of "joghurt" and "kefir."

It remains to be pointed out once more that Dairy Co-operation has proved a most fruitful propagator of other forms of Co-operation, bringing profit to the farmer, because it creates an apparatus which may well be turned to account for other purposes, and has sufficient spare power left in it to devote to such. Our Eastern Counties Dairy Farmers' Society does some trade in eggs, which is a very proper and very frequent adjunct to dairy business. Common purchase of farm requisites is another business readily tacked on to dairying. Where electric power is employed, that provides an opening for further use of the same power, at off hours, say, for lighting. Not a few foreign creameries (44 in Germany) maintain public baths

as a side employment. That is of course possible only in populous places where sufficient bathing accommodation is not otherwise provided, as it is now mostly in this country. Others have circular saws, corncrushers, gristmills and even full mills. Indeed, the variety of side uses given to creameries is considerable. The readiness with which creameries may be expanded to such larger co-operative establishments ought, in fact, to stand as a particular recommendation of them. And for that reason, as much as for their intrinsic utility, one may hope that a large number of them may, before long, be established in this country. The benefit which they hold out to smaller farmers is very substantial.

VI. DISPOSAL OF EGGS AND POULTRY.

There are special reasons why, at any rate, the small farmers' trade in eggs should by preference be organised on co-operative lines. That trade, and the poultry yard generally, have long remained a neglected quantity in the farmer's economy. For generations back the poultry yard has been looked upon as the specific realm of the farmer's wife, to yield dainties for the farmer's table and a little pocket money for his lady. In few cases only did ambition soar higher. One such case is that of East Sussex. Shrewd men in that division of the county, up on the sandy heights on which General Elliott, afterwards Lord Heathfield, had, with the assistance of a simple village blacksmith, devised effective means for defending Gibraltar—his connection with which feat is to the present day perpetuated on the spot by a monument raised to *Calpes Defensor*—had learnt to utilise the taste for poultry maturing among *gourmets* for business purposes, and turned the Heathfield district into a second La Bresse.* Large farmers sold their thousands of crammed birds—"Surrey fowls," as the market incorrectly called them—every year and out of this business netted a handsome profit; labourers on their small holdings made their £20 or £30 extra, of which half was set down as net profit. But all this, which continues to the present day in yearly increasing

* See the article on "Sussex Higgling" in the author's "Quaint Industries and Interesting Places" (1882), and also in "Sussex Industries," published in 1883. That article has had the good fortune of being reprinted as a lesson for the consideration of poultry keepers in almost every English-speaking country.

volume, was exceptional. Generally speaking the fowl-yard was considered a useful and picturesque, but very secondary, appendage to the farm.

The advent of an age of greater wealth and weaker digestions has led to the discovery that there is "money" in the poultry yard as well—substantial money, it may be—if it is only rightly treated, in a businesslike way, with a view to satisfying its particular market. That market is fastidious, but it has a healthy appetite and keeps constantly expanding—whereas its supplies from abroad, upon which it has in the past to a large extent relied, keep growing scantier and more meagre every year—simply because people abroad are growing wealthier and more dyspeptic like ourselves and asking for "light" nitrogenous food, instead of heavy butcher's meat. Nevertheless—not to speak now of poultry, of which we still import a goodly quantity—our annual imports of eggs stand at about seven millions and a quarter sterling, of which Russia supplies nearly half. However, in an economic sense, Russia is now becoming more and more tributary to her nearer neighbour, Germany which, with a growing appetite for the article, accordingly readily intercepts her eggs. It was time, then, that we should wake up to the fact that the poultry-yard may be turned into a Tom Tiddler's ground, and made to yield more than mere pocket money. In truth, one small farmer in Scotland—at Eday in the Orkneys—is reported by Dr. Drysdale (Secretary of the Scottish Agricultural Organisation Society) to have found, his poultry surpassing in remunerativeness the proverbial Irish "pig," paying his rent more than three times over.

Our awakening has been slow. But it has been very much stimulated of late by the excellent work done by the National Poultry Organisation Society and by its able Secretary, Mr. Edward Brown, who is now by general

admission the authority of authorities on this particular matter. That Society was formed only in 1898—not originally with the object of instilling or practising Co-operation, but merely to improve the breeds of poultry in our country, regarded as egg layers; to teach their owners to extract the maximum of benefit from them; and to correct the faulty organisation of the market, which at that time was truly abominable. Very soon, however, the National Poultry Organisation Society was brought to discover that, if it wanted to achieve the best possible results, it must needs organise on co-operative lines, because, in Mr. Brown's own words, "that would throw the responsibility more upon the producers, who had been demoralised by all-round price, regardless of quality and real value."

Ah, that is the point! If there was to be good work done, the market must be studied; quality—which in this case means both intrinsic value and freshness—must be made an object. And that could be done effectually only by fixing the responsibility for his particular supply upon every particular producer—for which purpose Co-operation supplies the most effective instrument, inasmuch as it makes the community of producers in one society the master and judge of every one of them, and is by such means placed in a position to enforce honest service and discipline, such as might be denied to a dealer.

But there is more. If the market was to be satisfied, there must also be uniformity, such as is to be arrived at by "grading." And to produce uniformity there must be bulk of supply, which means combination among many. For these reasons, and the other, very obvious one, that Co-operation will save the trouble and expense of individual marketing—or else the toll levied by the higgling collector—besides yielding a fresher product than the old-fashioned weekly market (now happily in most places

extinct, for the main disposal of eggs) people—elsewhere at any rate—willingly turned to Co-operation for bringing that once exotic bird—which Aristophanes still spoke of as “the Persian bird,” to wit, the fowl—to due honour.

Elsewhere—for to our loss we Britons have remained backward. Even now, after strenuous efforts, continued at any rate a dozen years, by the side of the imposing arrays of co-operative poultry societies existing abroad, we have only less than a half-hundred to show in England, about forty in Scotland, and a poor score or so in Ireland. The one continental province of Hanover has 142! Of these, 18 combine the breeding of poultry, or the sale of eggs, with other forms of Co-operation—dairying or distributive business. Ninety-eight societies were in 1910 egg-selling societies pure and simple, and these had in that year disposed of 27,500,000 eggs, realising thereby more than £80,000 for distribution among their members.

However, a brighter day seems now dawning.

Some of our co-operative egg-selling is indeed no doubt indigenous. Thus in the Orkneys and Shetlands canny Scots, after for a long time undergoing stern rule at the hands of the grocer—who was their one dealer and something of a tyrant—detected means of turning the tables upon him by combining to refuse collectively to sell eggs at less than a stated price. There is not much choice of supply in those northern latitudes, and eggs are a most perishable article to have on one's hands. The grocer wanted his eggs; he had his cart for collection ready bought, and could therefore scarcely do otherwise than give in. That is not the form of Co-operation here pleaded for. But it may be effective.

For a model of genuine co-operative egg-trade, we are, as in the case of dairying, beholden to the Danes, who, on the top of their trade with this country in butter, with native cuteness set themselves to organise a trade

also in eggs, at a time when England, itself neglectful of its golden opportunities, served as almost the only international market for eggs to count. They made a very fair start in the eighties. However, the London market grew dissatisfied. Eggs were delivered in a faulty condition, often dirty, or stale; or else, "pickled" eggs were palmed off as new. Between 1891 and 1895 this state of things, which may well serve as a warning for all times, reached its undesirable climax, and accordingly, promptly resolute, the Danes in 1895 formed their co-operative egg export society (*Dansk Andels Æggesport*) after the model of their successful wholesale butter exportation society, which egg society soon set things right because, exercising unbending discipline over its members—who had become accustomed to such treatment under dairy organisation—it was in a position also to guarantee to the market a genuine product of the best quality—tested, graded and new laid; or else properly "pickled" and offered as "pickled," at the right time. The Danish trade mark soon became a readily recognised passport for eggs.

The Danes have reaped the reward of the bold initiative thus taken—just as we have already been rewarded for following in their footsteps. The return obtained for the same number of eggs has increased by from 20 to 25 per cent., which in our case amounts to 2d. more per dozen or 2 or 3 eggs less for a shilling, while at the same time the customer is satisfied, receiving a more reliable article. The result has indeed been the same everywhere—in the United Kingdom, in Denmark, in Germany, in France. In Denmark, thanks to Co-operation, the English market was readily recaptured and retained. The exportation of eggs has, in Denmark, become a business of national importance. Whereas, according to official figures*

* Taken from "*Coopération dans l'Agriculture en Danemark.*"
Publié par le Bureau Statistique de l'Etat. 1910.

in 1895 only about seven million crowns' worth of eggs were exported, by 1909 the figure had risen to twenty-five millions. (There was, as has lately been stated in the *Economist*, a further increase of two millions' worth in 1910.) And whereas, in 1893, the number of hens kept in Denmark stood at 5,900,000, at the present time it reaches about 12,000,000. Accordingly, while the number of possible egg-layers has a little more than doubled, under co-operative organisation the value of the yield has nearly quadrupled.

And the prospects of commercial development have correspondingly improved. What Dr. Drysdale writes about Scotland holds good pretty nearly everywhere:—"Since the introduction of co-operative methods of collecting and marketing, the production of eggs within the area referred to has been enormously increased and interest in that department has been very greatly stimulated. Wherever an egg collecting society has been established, greater attention is being paid to breeding a better class of fowls, and to their feeding and general management. In some districts the portable hen-house, in which the fowls are kept on the colony system, is a new feature in the landscape."

The first object of co-operative poultry organisation is, of course, to facilitate the sale—let us for the present confine ourselves to eggs—by sending one person to market instead of many. Such elementary form of Co-operation is practised in what are known as "Egg-selling Clubs," in which a number of small folk raising eggs simply deliver such regularly to one person, generally a woman undertaking the work in consideration of a small commission, who carries the entire number to the consumers and collects the money for them. There is no question here of testing, or grading, of supervising, or of improvement of breed or of conditions of production. The business

is also necessarily restricted to a very small area and a mere cluster of neighbours. However, it answers so far, that there is no need of many people going to the dealer's shop with very few eggs each, or of allowing eggs to grow stale; and that a better price is usually obtained than that offered by the itinerant higgler.

Genuine co-operative poultry societies, even when confining themselves to the egg trade only, take a bolder flight. But it deserves to be pointed out that everywhere, even when operating on a fairly large scale, their business must always remain to some extent circumscribed by the very nature of the case. Eggs alone produce in each case, after all, only a small amount of business. The Danes have gone on the principle of organising one particular type of society for every distinct business, so that a farmer having eggs to sell and implements to buy, pigs to sell and so on, may have to belong to nine or ten distinct societies, in every one of which he will probably meet many of the old faces. However, even in their genuine separation, these societies are locally so closely clustered together that—among the intelligent past students of the "High Schools" composing them—the evils of separation are not much felt. Things are different in this country. And the trade in eggs, more in particular, is likely to remain in many localities within such humble proportions as of themselves among ourselves appear to dictate combination with some other business. The Danes practically admit the necessity of some such combination by entrusting the sale of eggs (by exportation), also to their Wholesale Butter and Bacon Exportation Societies. The most convenient arrangement that we could aim at would be that actually practised by the Lincoln Society, and probably, also by other Industrial Distributive Societies, of combining the egg business with rural distribution—the Society's cart, which distributes goods from the Store,

on the same journey also collecting the eggs destined for sale. Such arrangement greatly facilitates the prompt collection of eggs—which is, in truth, the crux of the whole proceeding—and leads straight up to those desirable interrelations between co-operative production and distribution, which every practical co-operator is sure to aim at making as perfect and comprehensive as possible.

The same thing has been done with excellent results by the Wickham Market Industrial Co-operative Society, which in the same way takes eggs as a return cargo in its carts after delivering goods, and disposes of them, after satisfying its own requirements, either to the Co-operative Wholesale Society, or else to the marketing section of the National Poultry Organisation Society. Under such arrangement, it found in the very first six months purchasers for 18,714 eggs. In the second year (1906) the sales went up to 185,000, in the third year (1907) to 449,000, and during the next 2½ years as many as 1,113,000 eggs were so disposed of. In this way a thriving business has been built up. And, the quality improving, the price has improved with it, going up, from 22 to 24 eggs, to 18 and less to the shilling. The same thing might be done, if industrial co-operative societies would turn their attention to it, in hundreds of other places.

Failing such arrangement, it will be well to combine the egg business, say, with dairying, which also requires conveyances and deals with the very same markets.

If a co-operative poultry society would do good business, it is indispensable that it should command a sufficient supply of eggs—to be collected from readily accessible farms or homesteads—to count in its own particular market. The first named condition calls for no explanation; the second is of importance, because, as has already been pointed out, collection presents some difficulties. Eggs are a highly perishable article, the

commercial value of which depends upon its newness. That is really a circumstance strongly in favour of English producers, with whom in the matter of newlaidness no foreigner can here possibly compete—more particularly since our native produce enjoys this additional advantage of being, for the most part, very near to its own particular market. The distance between hen-roost and market is in this country generally very much smaller than elsewhere. A little delay, a day's keeping beyond the narrowly measured period of only three or at most four days—during which the egg will retain its valued "milky" condition, and is therefore good for boiling—will make a difference of 25 per cent. or so in its commercial value. A few hours' sitting by the mother hen will almost entirely destroy its value. Therefore the society's egg depôt must be within comparatively easy reach of the henroost, and have ready access at the same time to its market. Generally speaking, a radius of about five miles is found manageable. A smaller district may make collection by carting dispensable. A larger district may easily be managed—where the supply is sufficient for such addition—with the aid of sub-depôts. However, a manageable area by itself is not everything. Supplying places do not want to be too widely scattered—or, at any rate, isolated suppliers will have to lay their account with having to deliver at somewhat greater trouble. Collection by collectors using their legs as means of locomotion is not uncommon. Within a narrow area it seems indicated. However, wherever the volume of business warrants it, collection by carts—to be provided by the society, which will have to charge for cartage—will be found most convenient.

For reasons already explained collection of eggs should be frequent—during the warmer season of the year not less than three times a week; at other times

twice, if possible. And during the "broody" months eggs should be taken from the hens' nests twice a day, to prevent sitting. Eggs should also be carried to the *dépôt* as expeditiously as possible, to be there as expeditiously dealt with.

The difficulty will, of course, have to be faced that there are eggs and eggs. And there are also hens and hens. A great deal may be done by "controlling" hens, as dairy cows are "controlled," and weeding out the unproductive ones, while designedly breeding from the good ones. Even in the same breed hens differ not a little in their laying capacity. Thus in a "laying competition"—such as co-operative poultry societies will do well to encourage—it was found that two "White Leghorns," of the same breed, which is a good laying breed, laid severally, the one 175 eggs in the year, and the other only 36. There are hens which lay up to 180 and 200 eggs. And there are others which stop short well under 100. The good layers are the hens to breed from for our present purpose. For fattening purposes a different standard will have to be adopted.

There are also layers of big eggs and of small. The difference in nutritive substance contained within the differing egg-shells is by some authorities stated to be trifling, if there is any at all. Where there is more "egg," there is alleged to be simply more water, to make up the size. However that may be, big eggs fetch appreciably better prices than small. Very small eggs are a drug in the market. The favourite size are what are called "fifteens," which means that a "long" hundred of them (120) will weigh 15 lbs., because these, when boiled, just fill a conventional egg-cup. Now the following figures will show to what extent the weight of eggs laid may be influenced by a careful selection of parents. At Dervock, in Ireland, in 1900, among 100 eggs brought

to the depôt, there were found to be forty at 13½lbs. forty at 15lbs., and twenty at 17lbs. By 1904 the breed had been so much improved that there were only ten 13½lbs., thirty 15lbs., thirty 16lbs., twenty 17lbs., and ten 18lbs. In the same way at Mallow—likewise in Ireland—there were in 1900, among a hundred eggs, fifty 13½lbs., thirty 15lbs., and twenty 17lbs.; in 1904, thirty 14lbs., thirty 16lbs., twenty 17lbs., and twenty 18lbs. Similar cases are reported from elsewhere. Thus, in Hanover, by dint of breeding, the average weight of an egg was brought up from 53.8 grammes, in 1904, to 57.2 grammes in 1906; and at Veyle, in Denmark, from 56.2 grammes in 1906 to 58.4 grammes in 1908.

In the United States, where there are large poultry farms, with from 7,000 to 8,000 hens upon them, one cute poultry breeder has managed to make a good deal of money out of a peculiar breed of his own, the demand for eggs of which, in New York, appeared insatiable. When he had fully stocked his own large farm, he hit upon the device of passing his superfluous hens, still of the same particular breed, on to neighbours, on condition that they should deliver the eggs to be laid by the hens to him at a stated price. By this means he managed to supply the market with large quantities. From this it will be evident that breeding by a careful selection of strains ought certainly not to be neglected. A union of co-operative poultry societies, such as there should be, can do much to encourage it by shows, egg laying competitions and also by the sale of selected chicks or eggs for breeding.

But there is another quality in eggs which wants paying attention to—not in the depôt, which in our narrative we have not yet reached, but in the poultry yard. "Infertile" eggs are found to keep longer than fecundated ones. There will accordingly be a distinct advantage in keeping the cockerel away from hens whose eggs are intended, not for hatching, but for selling.

In the last place there is the point of cleanness. A dirty egg is a depreciated article, although, of course, the outside dirt makes no difference to the inner contents. Washing is no remedy, because washing spoils the appearance of the egg—its “coat.” Well organised societies never take a dirty egg on any consideration, but return it with an admonition to the supplier, putting a distinctive, indelible and very visible mark upon it, to prevent its cropping up afresh in a washed state. They also send officers on an occasional round to inspect hens’ nests for the purpose of enforcing cleanness. Dirtiness may be easily avoided by keeping the nest supplied with clean straw.

Thus far, in our tale of the progress of eggs to their ultimate market, we have dealt only with general points, such as apply to non-co-operative production of eggs as well as to co-operative. From the present point forward, however, we shall have to take distinctively co-operative practice into account, to show how it deals with its eggs. Acting as a link with the market, it really stands, while safeguarding the supplier’s interests, in the position towards him of a dealer. Apart from quantity, it must make sure of the superior quality of its article. And to be able to do this, it must acquire sufficient power over every one of its members, to be able to compel him to deliver only good eggs. The first requisite for this is, that it should provide means for identifying the eggs of each supplier, in order, in case of necessity, to bring home his responsibility to him, and, if need be, to get rid of him in case of frequent repetitions of the offence. It does this by requiring suppliers to mark every egg destined for the depôt with their own distinctive number, as entered on the Society’s register. In Denmark suppliers are also made to add the number of their particular sub-district, which facilitates research. By this means the supplier

of every egg can be identified and made to answer for its quality. The number affixed, of course, counts for nothing in the market. But the society will not affix its own trade mark—or better still, the trade mark of its Union, which latter has a better chance of gaining a commanding position in the market—unless it has made sure that the egg will do it credit. The member's number in this way becomes a warrant for the use of the trade mark.

We may now assume the particular member's eggs, being duly numbered, to have passed into the keeping of the society which, before forwarding them to its market, will have to put them into thoroughly marketable condition and also examine them for their goodness. Prompt delivery being of prime importance, there is not very much time for this.

The society will, of course, need a suitable establishment for dealing with the eggs. That is, fortunately, not a very costly affair and, in the absence of funds, credit, such as we find to be forthcoming, may be in part impressed for its acquisition. In Ireland Joint Stock Banks make no difficulty about advancing a certain portion of the money to poultry societies at a moderate rate of interest, say, 4 per cent., on condition of gradual repayment. Three or four hundred pounds will, as a rule, fully suffice for all that is wanted. The money had best be raised by shares, which may or may not be apportioned according to the number of hens brought to the common enterprise. It will not be amiss to take an undertaking from members to deliver the eggs of so many hens for a certain period. In Denmark that period is a twelve-month at least.

In Denmark delivery of eggs to the society is generally by weight. That system, which is now generally considered the most convenient, is also becoming more and more common in Germany, where the number of co-operative poultry societies is considerable; and it has made

its way into Ireland. In old fashioned England people still appear to hang back. But one may expect to see our country, in due course, falling into line with others.

Once the eggs have reached the society, the first thing to be done is to examine them for their outward appearance. That applies mainly to the points of dirt, or misshapeness, or cracks and general condition—although the very first glance, often enough, tells not a little of the tale to be extracted by subsequent testing. Newlaid eggs have a peculiar gloss upon them and a bright colour. Dirty or cracked eggs must be unmercifully rejected. And Danish societies do not hesitate to expel members who repeat the offence of delivering bad eggs. Rough shells constitute more or less of a defect, because they lead consumers to suspect that the rough shelled egg is a "pickled" one sold for new. Rough shelled eggs accordingly should be discouraged.

Such general examination is followed by the now well-known "testing" or "candling"—in a dark room. The egg is held up against a powerful light which, like an X-ray, tells what is inside—whether a bright yolk, with a small airspace, or an advanced ovum, with a large airspace and a film or shadow, or, worst of all, an eggsubstance in course of conversion into a live bird. The more powerful is the light, the more clearly will it reveal what is within the shell; and the more expeditiously will it admit of the examination being carried out. But in no case should this be done in a careless manner. Some societies, grudging the time, have devised a method of "candling" a whole tray of 120 eggs together, ready for packing, in their several compartments, which is said to occupy only about half a minute. Such testing, however, cannot possibly be as thorough and trustworthy as testing egg by egg. And, really, even that does not take very long. A trained tester may be relied upon for testing five or six hundred eggs within an hour.

Next comes the "grading," which is at the same time preparatory to packing, for the "graded" eggs are at once put into their several compartments in trays, which are afterwards placed in a box and firmly secured for carriage, with straw between, to prevent their breaking. Such boxes are now made with very convenient arrangements, and safe to prevent crushing. "Grading" means sorting according to size. Its object is to obtain uniformity of product—uniformity above all things in size, though it may also be done for colour. The question of colour in eggs is, as a matter of intrinsic value, of little account; however the varying taste for either white, or tinted, or brown eggs may locally influence the price. A trayful of eggs, if of exactly the same size and shape, presents an incomparably more attractive appearance than a promiscuous assortment of eggs of all sizes and shapes. There are in this country mostly six sizes recognised, namely, from 13lbs. to the "long" hundred up to 18lbs. French societies are content with only three, different sizes. "Grading" is done by eye and hand. Where eggs are not delivered by weight, small eggs are still placed by themselves and allowed for at a reduced rate, because they are not liked.

One very important point, upon which co-operative poultry societies will be in a good position to bring their influence to bear, is the supply of eggs in winter. The more steady the supply, the more secure is the market. And the chronic absence of a winter supply of English eggs, which is rather a reproach to our country, has driven not a few dealers into the arms of Danish competitors, who know well how to provide for such winter supply, which sells not only itself, but also the summer eggs, to greater advantage. There is no earthly reason why this state of things should continue. A winter supply of eggs is merely a matter of arrangement. Maintaining

the laying birds in laying condition during the winter, by keeping them active, giving them a run, so as to harden their muscles, either in the open or else in a shed—on the floor of which there should be grains of wheat strewed beneath a cover of chaff and rubbish, so as to tempt them (*rasores* as they are) to a scratch (instead of reducing them to a lazy hibernating condition, which softens their muscles, as if they were intended for table use, by keeping them idle), providing them not too liberally with food, but giving in that food also some nitrogenous matter to make up for the spring worms (also chopped and dried clover)—all this will make hens lay if they are laying birds. A steady market is of importance above all things to a co-operative society, which is dependent upon continuity of business. And there is no one to bring pressure to bear more effectually upon individual poultry keepers than such a society, whose fiat is known to be not arbitrary but dictated by the interest of the influenced member himself.

It need scarcely be expressly stated that societies will do well to affiliate themselves to a larger organisation which, while taking proper security for good, conscientious service, authorises them to use its own brand as a trade-mark. That trade-mark may be made a safe passport to the market. The practical value of a "Clearing house for eggs," such as has recently been set up in London by the National Poultry Organisation Society, requires still to be tested by experience. The Danes have their Egg Export Society for *exportation*. And in Germany, within the various provincial unions, co-operative service is so well centralised that members secure all the benefits of centralisation as a means of delivering to the best market in their own organisation.

The settlement of accounts as between the society and its members should be prompt. No matter whether

payment be regulated by weight or by number, a price should be agreed upon which leaves a margin for management expenses and something more, to be eventually allowed as "dividend." The increase in money paid for eggs under co-operative dealing is such as to admit of payment at once of the current market rate. And that price should be dealt out at frequent, regular intervals, say monthly.

Opinion is not at one on the point frequently mooted, whether, by the side of the sale of eggs, a poultry society will do well also to take up the fattening of poultry for sale for table use. Obviously there is ample scope for useful action for it in providing for its members eggs of good strains for hatching or, it may be, ready hatched chicks. (By the side of hens' eggs it may also deal in ducks' eggs, for which there is always a market.) The fattening of poultry, on the other hand, is a line of business in which the conditions specifically calling for co-operative action come much less into play than in the sale of eggs. A co-operative society may indeed render excellent service in organising the sale of fattened poultry as coming from individual fatteners, wherever there is promise of anything being gained by such proceeding. There ought, for instance, to be a good opening for business on such lines with the distributive societies. But otherwise there seems to be little in the fattening business which specifically requires intervention by a co-operative society, the object of which is by combination of many contributors to produce bulk, quality that cannot be suspected, and uniformity. Bulk is much less of a necessity in the supply of table poultry than in that of eggs; uniformity is scarcely attainable—even if it be desirable: and of quality consumers prefer to judge for themselves in each individual case. A distributive store which lays itself out for fattening pigs does so to turn the mass of nutritive

refuse accumulating under its trade to profitable account as a side-use to its business. A co-operative bacon curing establishment relies upon its members for their pigs ready fattened, coming from so many individuals, to be converted into one common mass of bacon. A co-operative poultry society might indeed fatten its members' chicks. But in that case the sale will be simply a commercial venture and the subsequent fattening will be a speculative undertaking, in which members act only as pecuniary shareholders, not as active participators. The peculiar skill required for selecting the right birds, treating them in the right way, and stopping feeding or cramming at precisely the right moment—without which, there may be loss—are qualities which agricultural folk may very well acquire for themselves—as witness Sussex results—and are even likely to prefer applying every one for himself.

Of course, in the right place, there is "money" in poultry fattening as there is in egg raising. But there are very great differences between the two industries. Different kinds of poultry are required for each, and different situations of country. The active, restless bird which is a good layer, is a poor bird to lay on flesh. *Vice versa* the soft fleshed bird, which provides succulent chicken's breasts, is a sorry layer of eggs. Once more, the clay soil with a rather backward character, on which egg layers may yield good results, will not at all suit a fattening fowl, which requires to mature readily and delights in a dry, warm soil, with plenty of sunshine. And climate and general conditions come the more into account that fattening is an artificial process which no fowl can stand for more than a limited period—not even every fowl for the accepted maximum space of three weeks. Co-operative poultry fattening has of late been taken up to some extent in Germany, and satisfactory

results are said to have been obtained. It appears also to have been tried here and there in the United Kingdom. Perhaps, however, cautious co-operators will do well to await the results of further experiments before rushing into a line of business which, on the face of it, appears rather intended for individual enterprise than for common action.

VII.—DISPOSAL OF GRAIN.

Various causes have led agriculturists abroad, who have shown readier resource in such matters than our own, to try their hand at the collective sale of grain. This can scarcely be held surprising. For, after all, in whatever proportion the area covered by it may have been reduced, grain still figures very prominently among our farm crops, as the crop which in most cases constitutes, so to speak, the farmers' "ready cash." As the causes suggesting the new departure have varied, so, very naturally, have also the methods put into use and the results obtained. At one time, when Agrarianism had very much the upper hand in Prussia, and the Government obligingly voted five million marks in support of grain stores—to benefit the privileged class of landowners—most grotesquely ambitious ideas were afloat as to results, and a second South Sea era seemed to have set in. Every one in the movement persuaded himself, so relates Professor Thiess—who at that time was General Secretary of the largest and most influential Agricultural Co-operative Union, and therefore had good means of knowing—that he was going to grow rich by appropriating by degrees the wealth of others. The bubble came; the bubble grew; and the bubble burst. And all the king's horses and all the king's men could not put the State aided grain stores together again. Nobody would look at them. That gave co-operative grain stores for the time a decidedly bad name; and there was not a little jeering among opponents—who were right enough, as it happened, in their condemnation of the methods adopted and the objects aimed at, but who failed

altogether to discern that under such disappointing husk there might lie concealed an after all very valuable kernel. German landowners and those who patronised them had simply allowed themselves to be carried away by a rushing tide, without chart, rudder or compass, and had in the rush lost their heads. They had started on the wrong tack altogether. They had heard that there were wheat "corners" in the United States succeeding magnificently in "rigging the market"—thanks to the "Elevators" which they had at their disposal. (This was at a time when American "Elevators" were still all in private hands.) Why should not they start similar "Elevators" and become rich like Mr. Leiter? A Pomeranian landlord made it his task to "study" "Elevators." And full of his brilliant ideas, the realisation of which was to bring unheard-of Plenty to his class, he set a propaganda going, in which he found only too ready disciples among the *junkers*, and accordingly a ready supporter in the Government, which loves *junkers* and willingly places the general taxpayer's money at their disposal. There was to be gold for those who wanted. Every squire was to become a "Leiter." However, even Mr. Leiter could not carry his game completely through. And the five million marks handed over to these modern "Laws" to bubble with bubbled out very quickly indeed, leaving blank disappointment behind. The idea of capturing the market was on the face of it preposterous. German "cornhouses"—including many outside the charmed circle raised by Government grants—a year or two ago did a business of about £1,000,000 a year. That is a respectable figure enough—even though a considerable proportion of that trade was due to the Government becoming a purchaser by favour. But it is nothing to the collective trade in corn done in Germany, even in German-grown grain alone, probably about a twentieth. And with such a popgun there was no war to be waged upon the well-armed market.

The covetous squires had not been allowed to go without due warning. Professor Wygodzinski had cautioned them that they were operating upon wholly untried ground. Others, leaders in the agricultural co-operative movement, demonstratively held back. The chairman of one of the leading German Agricultural Co-operative Unions remarked to me chucklingly in 1903: "You do not know how thankful I am that I did not consent to 'burn my fingers' with cornhouses."

The false object pursued was really only one of the causes accounting for miscarriage. The Government grant necessarily tempted the promoters to unreasoning extravagance. "How could you expect our people to calculate closely when they had this heap of unearned money forced upon them?" So observed to me last summer the Chairman of another great sectional Union, one of the ablest men in the movement, in whose very locality one of these pretentious "cornhouses" had come to grief, but in which also other "cornhouses," managed on different principles, answer very well. Things were done on a grand and costly scale. Storehouses were built too big for their requirements—and more than one was built in the wrong place. Costly machinery, going much beyond actual or likely requirements, was set up. And in the last place, as Professor Thiess is particularly careful to point out, the "shoemaker" ventured a good bit beyond his "last." Farmers as a rule have not the capacity for acting as dealers in corn. The managers had in the end to confess themselves vanquished by the regular dealers.

Thus ended one of the most showy and noisy episodes in the history of German Agricultural Co-operation.

However, its result has not been all loss. If a heavy fee has had to be paid for schooling, knowledge has certainly been got. Organisers had had their bold fling and would know how to do better in the future. If the grain stores

—of this kind—had in general closed with balances on the wrong side, it was now known what were the causes. And in any case their neighbourhood had benefited. There could be no question that prices had improved and quotations had become more honest. Competition had done part of its work.

And a good deal that is valuable has remained. When, in opening the 1911 Congress of the Imperial Union of Agricultural Co-operative Societies of Germany, Herr Johannsen presented his Report upon the condition of Agricultural Co-operation in his province of Hanover, he observed:—"Our grain stores set up with *our own* money are doing well; those set up with Government money have gone the way of all establishments of the same class." Hearty laughter greeted his closing words. "It is best to be candid," so said Herr Rabe, chairman of the Sectional Union of the Province of Saxony—in which the worst collapses have occurred—a year or two ago at the annual Congress of German Agricultural Co-operative Societies; "there is no denying that we have burnt our fingers badly over the first introduction of 'cornhouses'; and that has happened, in the first place, because we were ignorant of the conditions that we had to deal with, and, in the second, because we confidently placed ourselves in the hands of the engineers providing the machinery, who set up costly plant without for a moment considering whether the concern would pay or not." The official *Reichsanzeiger* admits the same thing. Results have been best, so it owns, where State aid has been least.

To take another instance—as a direct outcome of that misdirected State-subsidised movement, there is, in the pre-eminently agricultural province of Pomerania (which produces much more corn than it can itself consume) a very satisfactory organisation of the co-operative grain trade, a network of local stores being spread out over the

country, which dispose of their corn—twenty or thirty times their own holding successively in the year, in their great emporium—through the Central Warehouse, owned and worked by the Co-operative Central Sale and Purchase Society of Pomerania—at Gotzlow. Gotzlow is a suburb of Stettin, situated on the Oder, with river wharves on one side and a railway siding on the other, from which large quantities are annually shipped to Scandinavia and to England, or else forwarded to Western Germany. That is a distinct advantage for contributing members, who now net a better price on their corn by from 4s. to, in some cases, 8s. a ton. Gotzlow sells about 80,000 tons of corn every year.

Similar valuable remnants have been left elsewhere. Apart from this, the Prussian "boom" has imparted a healthy stimulus to the movement in other quarters.

While Prussian squires were blindly following their Jack o' Lantern leader in the North, attempts to bring the undoubtedly important problem to a satisfactory solution on very different lines were being pushed forward elsewhere. There can be no doubt that something of such a solution has been found. However, unfortunately, even on this ground there is the disconcerting interference of the would-be fairy godmother, to wit, the State, to reckon with, which makes it difficult to determine with any positiveness, how much is gained on one side and how much lost on the other.

In truth, the question of co-operative sale of grain was bound to occupy the agricultural mind in Germany, and it has done so in some places since the middle of the past century. It ought to be borne in mind that the grain trade is in Germany organised in a very different fashion from our own. It is far more decentralised. Local markets still command a sort of independence. The differences occurring in local prices are indeed startling,

as was to be seen in the charts and tables prepared in connection with the inquiry of 1903 preceding new legislation on the Tariff. In the South of Germany this state of things is particularly marked. The dealer accordingly had a very free hand and could worry the impecunious farmer not a little. That means that, in spite of Count Bülow's tariff, a very heavy pressure was brought to bear upon the local producer of corn. And it was to get away from such pressure that people since a long time attempted to combine and eventually succeeded in doing so.

Furthermore, rural Germany is sorely afflicted with dealers' usury, against which the small owner finds himself helpless without combination. The man who bought his corn was the same gombeen man who sold him fertilisers and other indispensable agricultural requirements, and occasionally advanced him money. And if the small farmer would not take his adulterated fertilisers from this man, he in his turn declined to take his corn off the farmer's hands. When he took it, he took it at his own price, and at his own time. There we have the "touch of Nature" which makes "the whole world kin," from the banks of the Shannon, across the plains of Germany and Russia, to the banks of the distant Ganges. What philanthropic men are trying to do in India by means of their "Dharma Golas" (grain stores, or "grain banks," as Indian Registrars have taken to calling them) to rescue the rayat from the clutches of the rapacious *bania* (who gives him rice or paddy at one price and buys it back at another), men like Raiffeisen and his pupil Dr. Heim, who have achieved a distinct success in dealing with the problem, have tried to accomplish for the *Bauer* in Germany. The Raiffeisen system is in truth responsible for very much that is good, that has been achieved in this connection; and more specifically the number of small local stores, for small local men, centralised under a provincial head, to be met

with, say, in electoral Hesse and in Bavaria—the two model provinces in this respect—but also elsewhere, are its own proper children. They do not stand by themselves, but form departments of what we know by the name of “Raiffeisen Banks,” which are in truth intended as societies for satisfying *all* wants of their members that Co-operation can meet—buying and selling no less than advancing money. It is not by any means necessary to form distinct societies to do the grain selling. Where business is heavy we had better do so. Among small men a “bank” or a “sale and purchase society” will answer the purpose equally well, if only it equips itself adequately for its task and carries on the business as a distinct branch in a businesslike way.

In some parts of Germany the determining cause has been another than the presence of the usurer. In Saxony, to take one instance, the figure of the small miller, once so familiar to the small farmer, had wholly disappeared. There were big steam mills, whose owners did not want to be troubled with the small lots that peasants had to offer. They ignored these men entirely, getting their corn in large consignments by big contracts from elsewhere. That means that the small farmer was left at the mercy of the small dealer, who buys up small lots to resell to the larger dealer; this man, in his turn, disposes of such corn in large quantities to the steam miller. There are thus two or three tolls levied upon the corn on its way from the producer to the ultimate consumer. Why should not the producers keep such tolls for themselves? They can do so by combination.

Lastly, there is in some districts profitable business to be done by combining, in order to obtain better value as seed corn for particularly favoured varieties of corn suited to peculiar districts. In Switzerland small cowkeepers combine to form collectively pedigree herds,

the beasts of which fetch, not butchers' but breeders' prices, which are much higher. In France, cultivators in favoured districts combine to sell their red clover seed in common. In the same way growers of "Probstei" rye—the favoured seed corn all over Germany—in Holstein have combined—since as long ago as 1885—to sell their small lots of rye for seed. And so do the peasantry of the Fichtel mountains in Bavaria, to dispose at better prices—though not exclusively for seed—of their prized mountain oats. German farmers generally take their seed by preference from a colder place, where the conditions of vegetation are less propitious. So they go to the mountains for their oats, and to Holstein and Sweden for their rye and wheat. Similar things are done elsewhere. It is combination which makes climatic or topical advantages convertible into money for the small man. And this practice foreshadows one that has subsequently been adopted with distinct advantage, even where corn is not cultivated expressly for seed, namely, that of making local crops, passing through the co-operative grain store, uniform—just as we do apples and pears, and as dairy societies do butter and cheese—so as to secure for them a better market. By such means Co-operation has it in its power to benefit the local corn grower not a little.

Although a solution of the problem has been attempted since a long time there proved to be what looked like insuperable obstacles in the way. The most formidable of these was this, that people could not be brought to deliver up to sample. That is a general complaint abroad—in France and in Italy as in Germany and Austria—which the little experience which we have had in the matter in the Agricultural Organisation Society has shown that we are, in this country, exposed to in a much smaller degree. Our societies have repeatedly negotiated an occasional sale of members' corn. And although such casual business

does not in any way realise what co-operative sale of corn under our present view should aim at, at any rate no exception has in any case been taken to the quality of the corn delivered. Abroad things are different. And in 1883, at the very inception of the first tentative movement undertaken by so skilful an organiser as Dr. Haas in what was then his modest little Hessian Union—since developed to the “Imperial Union” with about 20,000 societies—the attempt to sell corn on co-operative lines had to be wholly abandoned for this cause.

It may be appropriate now to ask what we hope and expect to gain by organising co-operative grain storing and grain selling. It is not, as observed, merely to be able to carry through an occasional sale of a lot belonging to one of our members. That is a thoroughly legitimate object—which, moreover, is not at all unlikely to lead up to more permanent and more substantial business, and by means of which our man may well hope to secure a rather better price. With regard to such trade we stand on the whole in this favourable position that, although we have not War Offices and other public departments to befriend us—as they do abroad, in Bavaria to the extent of nearly 70 per cent. of their purchases, at preferential prices—we have large industrial stores and co-operative mills to trade with, from which by the light of past experience we have some sort of title to look for consideration carried to this point that, price and quality being equal, our co-operative offers will be given the preference. For such business—and indeed for other business as well—we have, as abroad, no need of distinct grain storing societies, even outside the Raiffeisen circle, if only ordinary buying and selling societies will make the necessary provision for what is required. Grain storing and grain selling are very commonly combined with other sale and purchase—where Governments are purchasers,

above all things with the sale of hay and straw. And provided that there is adequate accommodation for all the various goods, such combination answers well enough.

Our real object, however, is to secure for our members, if possible, a larger and more enduring benefit. They are to have a market always open to them, in which they know that their produce will at all times be taken at a fair price—a market exempt from those violent ups and downs, stringencies and excessive ease, of the dealers' market. They are to be made independent of dealers and not exposed to their oppression and fraud. There are to be facilities for their obtaining money in advance on the security of their warehoused corn, without their being made to pay for such accommodation "through the nose."

Co-operative grain stores can accomplish this, when properly conducted and federated. Indeed, they have accomplished a great deal of it already. Even in the small, timidly tentative pioneer establishments which have found their way into France—there are very few of them—it is on record that slightly more money is paid for corn than in the open market. In Germany the difference is more marked—quite apart from those more or less subventional prices that Governments allow to favoured societies "for the promotion of Agriculture." There is, as Major Endell explained at a recent Congress of the "Imperial Union," a difference of from four to eight shillings per ton, and even more. There is a lesser difference, of which no record is kept (but which is none the less real), in the prices paid by dealers generally, having the fear of the competing store before their eyes. And there is a difference, by no means unimportant, in the market quotations published, which issuing authorities, under the influence of dealers, were in the habit of keeping below the true point—just as our published wool prices, settled

during the local market dinner, are wont to keep below the price at which wool passes from hand to hand, once the dinner is over. In provinces where co-operative grain stores are sufficiently strong, these now publish their own quotations, by the side of the others. And corn is also now currently sold in many places by the co-operative quotation. For the co-operative societies' figures are those at which they themselves are willing to buy—not those at which they sell.

With such aids the dreaded competition of dealers has turned out much less formidable than was apprehended. It is quite true that Grain Stores are execrated by local dealers and that small farmers are either teased or else cajoled into deserting them. However, on the other hand, large buyers, such as steam millers, have in many instances found out that there is a distinct advantage for them in contracting for large quantities with a society, more particularly where the corn cultivated is uniform in kind; and they buy gladly from them. That quite makes up for the hostility of the small dealers. To the latter, of course, the preferential orders given by public departments constitute a real grievance. Also the very much improved cleaning of grain, which has to be set down to the credit of co-operative granaries, has secured the latter not a little popularity with buyers generally. For the larger quantities handled, and the discipline exercised in the interest of the common concern enables committees to produce corn of distinctly greater cleanness than is otherwise to be met with.

In this way it is found that a market is after all to be got.

The next requirement is that that market should be made enduring. For, unless it is so, Co-operation would fail to secure to its members that which these above all things value, that is, independence of the dealer; and

the desired certain outlet for members' corn will be wanting. It is on this ground that merely occasional sales cannot be held to realise anything like the object placed before us. Custom cannot be made certain unless there is permanency. And none of such improvements as the standardising of local corn and the creation of special varieties are to be attained without it. It is necessary to the large society; it is no less indispensable to the small, which is likely to be the form of combination that we shall for the most part have to cultivate if we adopt any. Permanency of the market necessarily presupposes permanency of supply. The discovery of this fact has led organisers of co-operative grain stores to abandon their timid shrinking from the condition of compulsory delivery—of all corn not required by the member himself—which in the earliest stages of the movement not a little hampered progress. So long as members were not under an obligation, they remained exposed to the temptation of accepting an offer from a dealer, purposely made seductive, for their good corn, and so left their society either without reliable supply, or else supplied only with the leavings of the dealer's eclectic marketing. On the other hand, it is not co-operative to buy, as is done in some German grain stores, from non-members as well. There is that nasty "labourer in the vineyard" grudge of benefit done to outsiders by co-operative trading, which makes co-operators envious. At any rate, they would have the small dealer's profit upon outsiders' corn, and gain in prestige by having large quantities to sell. Much the better plan is by refusing to purchase from outsiders to induce such to come in.

Although members are now generally required to bind themselves to deliver, they are not placed under any obligation in respect of time. They cannot reasonably be bound to that, but must be left free to deliver whenever it suits themselves. Really the time of delivery makes com-

paratively little difference to the member, seeing that he is permitted to raise money upon what becomes in truth a deposit in grain, at the ordinary rate of interest. This is really more a matter of credit than of grain storing. But the existence of a grain store makes the transaction considerably easier, among other causes, because there is a place where to store the grain. Provision for credit is necessary, because the main cause of the farmer's dependence upon his dealer now is that, for the sake of having money, he finds himself compelled to sell when under ordinary circumstances corn is cheap. There are districts in which such right to borrow is made scarcely any use of. But there is provision made for it everywhere. And in many districts it is largely resorted to, even Government assistance being invoked to provide the funds—wherever the State acts as patron. The proportion of the value pledged allowed to be levied varies, generally speaking, between 75 and 80 per cent. of the market value at the time. With the help of access so given to its purse, the Society emancipates anyone who chooses to be emancipated entirely from thralldom under dealers.

Such are the direct advantages to be secured by combination. But the indirect advantages of improving local cultivation of corn, standardising it, and of organising Agriculture, are certainly no less substantial. Uniformity and "standard" tell in respect of corn just as they do in respect of other produce. And to the small cultivator the grain store becomes a boon, such as our small holders are likely to find it "bad business" to do without.

The Co-operative Grain Store, like the Co-operative "Creamery" or "Cheesery," wants to secure, retain and improve its market by acquiring a reputation for disposing of superior produce of a uniform kind. Accordingly it brings personal pressure to bear upon its members to cultivate the varieties of grain most suitable to the locality

(not rarely undertaking to provide the seed), and to cultivate it well. It teaches—as do “Control Societies,” Dairies and Egg Societies. And the results are to be seen in an improved description of corn produced in the locality, well cultivated, well cleaned and uniform, so that comparatively considerable quantities may be put upon the market. Under such influence corn growing has become more perfect and more profitable, and the entire district has been benefited by co-operative selling.

That consideration quite naturally leads us on to the best form among those hitherto practised, to be given to the society. Such “best form” among ourselves appears decidedly to be that of small societies, with unpretentious equipment, operating each one within a restricted, self-contained district, for small farmers and small holders—something like the societies already spoken of as having worked very satisfactorily in electoral Hesse and Bavaria. It is possible that we may have room for the large stores after the Pomeranian pattern. It is possible that large farmers may find their account in combining to furnish large quantities of marketable grain to dispose of directly to the ultimate consumer. However, against any gain to be so made the cost of management and keeping will have to be set, which is rather considerable. And any credit needed is, as already observed, to be got without a store society. However, for the small holder a store society ready to garner his grain, to clean and dress it, and ultimately to sell it, is likely to prove something approaching to a necessity. His own accommodation for storing grain is likely to be small indeed, and defective at that.

For this reason in not a few foreign grain stores members are allowed to store their grain temporarily, at a moderate charge, even without desiring to dispose of it through the store. That is not likely to commend itself

as a general rule. However, our small man has no cleaning apparatus, no place where to keep his corn sweet; he may be altogether ignorant of the way of doing so. The grain store will have not only the requisite space, but also all the necessary apparatus for turning out an unimpeachable article. In some small societies members are allowed the use of the cleaning machinery, taking the tailcorn, &c. away with them, and leaving only the good corn. But the society is likely to use its appliances with better skill and better effect itself. In large stores there is even sometimes a desiccating apparatus. This is now very often moved by electric power, the portable motor being freely applicable on the corn floor. By a curious conceit it is popularly termed an "irrigator," because the motion of the corn made to drop through the air resembles that of descending water. Such treatment is reported very useful in the case of damp corn, but also a trifle expensive. The Prussian Government, when granting its £250,000 for "Cornhouses," itself established one at Berlin for experiments, which have turned out of great interest and some of them of practical value. Among other things desiccation by artificial heat has there been proved to be of distinct advantage, because it reduces both bulk and weight; at the same time it produces an article which will keep and also "bake" much better than moist corn. That does away with the awkward necessity to bakers in northern Europe, and more specifically in our own humid climate (in which we cultivate for the most part "red" wheat) having to resort to an admixture of a fair proportion of wheat grown under a more powerful sun—by preference Hungarian—because of native grain "baking" badly. Artificial drying of our northern wheat does away with such necessity.*

* The change so effected recalls the difference made in Japan between "glutinous" and "non-glutinous" rice, to the advantage of the latter as a commercial article, although less nourishing.

However, small as the "unit" society will, as a rule, have to be, its organisers will be committing a serious mistake if they leave it in isolation. Something more will have to be said on this point at a future stage. Suffice it here to observe that federation under a competent head, taking as much as possible of the expert guidance upon itself, is an important condition of success.

The setting up of grain stores in itself presents no serious difficulties, unless they be of a financial nature. And such ought not to be insuperable; for every society is allowed full freedom to cut its coat according to its cloth. Where people embark upon the establishment of a costly granary, to yield a fair profit upon a large turnover, it is to be presumed that they will be possessed of the means for doing this. There are grain stores which have cost £16,000 or £17,000 to set up; there are others which have cost less, £200 and down to £75. According to the needs of the particular case ought the equipment to be. The dire fate which has overtaken the costly stores, extravagantly set up with the help of Government money, ought to serve as a warning that, although resort to loan capital will certainly have to be admitted, this is not a case for borrowing recklessly. The mere building represents only comparatively small pledgeable security; and so do the appliances. In ambitious grain stores very much money has been spent upon the mechanical apparatus. But that is not, under the circumstances, a very valuable object to pledge. Its remunerativeness depends upon its working. Apart from machinery, there was in the earliest stages much waste practised, also, in the disposal of space and multiplication of partitions. Further reference will have to be made to this. Experience has to some extent corrected this tendency, and at present horizontal warehouse space, though the best for keeping and "moving" purposes, is carefully economised. Corn is now by preference

stored in perpendicular tubes, miscalled "silos"—for a "silo," in the original meaning of the term, is a bottle-shaped receptacle, dug underground which take up much less room. But that presupposes that the corn is all of one quality and sufficiently dry. For, although there is stirring machinery in the "silo," grain at all moist would heat or go mouldy in little time. However, corn is not usually kept for long together in "silos," which are used by preference where grain passes in and out many times a year. It is for such storage also that the artificial desiccating method is found useful, stirring being practised by electric power. The horizontal floors are now placed above the "silos." There is no need to enter into further details as to appliances for hoisting and discharge. In small parish grain stores there is nothing of the sort. And nothing is wanted. One or two good, well-ventilated floors and the necessary cleaning apparatus, a balance and the like, are sufficient.

However, there are difficulties to be faced alike on the score of method and of skill in management.

In respect of method, a variety of systems have been tried, and still continue in use. Grain has been sold without being stored at all, by sample only; and practical men in industrially developed districts, in which means of transport are plentiful and there is an active movement of goods, tell me that they find this system quite sufficient and very useful. It eliminates, as a rule, not one, but several intermediaries, brings the ultimate consumer—that is, the miller, or in the case of brewing barley (which is made a feature of in districts producing good barley) the brewer, or else the dealer in provender—into direct relations with the producer, and, by making all the proceedings open and public, does away with the hocus pocus of false quotations. It is the society which issues the quotation, not with a view to depressing prices in

the interest of buyers but, on the contrary, with the object of attracting sellers by stating the true figure. All these things are so much to the good for the farmer. But under such method pawning the corn to be sold becomes difficult ; so it practically excludes farmers who desire to raise money upon such.

The next method in use is that of substituting agency for mere broking, storing the corn delivered, and dealing with each distinct deposit, so to call it, by itself, charging so much for keeping, and keeping in good condition, and so much for commission on sale. This is for some reason, which is not very self-evident, often described as "the most co-operative" method. There is this to be said against it, that its requirements for space are very considerable, and that it entails comparatively very heavy expense in keeping, which is, as Herr Johannsen has rightly explained at Hanover, the most serious item of outgoings in the whole process.

Such drawbacks are to be in a measure overcome by "pooling" a number of grain deposits, blending them for common sale, but still merely as a matter of agency. It only means that so many depositors—as many as agree to the proposal and have supplied grain suitable for the process—enter into a common account, leaving the society to dispose of the blended corn and taking each his share in the proceeds, according to the quantity delivered. This undoubtedly gives greater scope for action by the society and facilitates sale by producing a large quantity of a uniform product.

In the last place, there is the method—which for some reason or other has been pronounced the "least co-operative of all," but which has proved the most successful, and is becoming more widely practised from year to year—under which the society buys the corn delivered at once, for its own proper account, and deals with

it according to its own pleasure. That, of course, constitutes it an *entrepreneur*, with interests of its own; however, those interests are, after all, the interests also of all its members. This system, so it is quite true, involves a certain amount of risk, such as competent management should reduce to a minimum. But it also presents distinct advantages. And why the description "co-operative" should be restricted to commission agency only, it is not quite easy to divine. Having a free hand in dealing with its corn, the society is in the best position for turning it to good account. And such practice also gets it over one doubtful point which has troubled some committees not a little, the point, that is, of the rate at which corn delivered for sale is to be paid for. The object of the society is to come as near a steady unchanging price for its members' corn as can be. The member who requires money at the period when corn is a drug in the market is not to be penalised for such want. He is to receive an advance, which a Raiffeiser society can supply out of its own means or credit, another society out of funds which an arrangement with some bank is to make available. On the other hand the society is not to be "bled" by all members forcing their corn upon it at a time when corn, say, is up, but on the point of going down. Under such circumstances the society might find itself exposed to loss. In Pomerania at one time the principle adopted was to take the corn delivered at any time, but to calculate its price, once for all, only at the end of the year on the average of what it had been sold for. That plan however, gave rise to much dissatisfaction and had to be abandoned. Under the "purchase right-out" plan the society may vary the price paid more conveniently without giving umbrage, though it may have to retain a small portion of the purchase price until the end of the year, to keep itself safe.

The other cardinal point in the organisation of a

grain store society is:—sound, commercial management. That is a point of the greatest possible importance, but which has been very much disregarded in the past. And hence so much adverse experience. Frederick the Great with his own keen judgment detected the necessity of this as long ago as in 1770, when by a royal ordinance he invited the “nobles”—that is, the landlords—of Pomerania, to form societies for the sale of grain (more particularly by exportation) but not without placing “a sound and experienced commercial man (not a scape-grace)” at the head of the management. Now, good management costs money, which will repay itself only out of sufficiently large transactions, and a golden rule for grain storage societies is, as Herr Johannsen has particularly urged quite recently, to economise in management expenses to the utmost that is possible. So urgent was Herr Johannsen upon this point that he went the length of affirming that “our grain stores pay best when we do not employ them”—that is, when we do not have grain stored there, the watching and keeping of which involves expense. However, good management is perfectly compatible with economy, if you sufficiently widen the field of the manager’s action. That is the plan which has worked so well in electoral Hesse, under Raiffeisen inspiration. The same system of clustering a considerable number of small—and even fairly substantial—stores round one central store, which exclusively directs the entire operations, has been resorted to elsewhere, in every instance with good results. Pomerania has its Gotzlow, Bavaria its Central Bureau at Munich, with a central store under its charge at Moosach. However, Pomerania caters, not without Government assistance, for large agriculture as well as small, and of necessity distributes its managerial competency in tolerably large stores over a wide area, in which it finds suitable employ-

ment; and Bavaria has a rather generous Government fairly standing at the elbow of its stores. In Hesse the movement is self-generated and self-supporting, by the Raiffeisen societies acting for themselves, and it is in its nature very like what it is likely to be in this country among our small holders, once it comes to be established—except that the stores set up, being placed at central points, are larger than what we may expect to see set up here. Nevertheless, the principle is the same, namely, that under the supervision of the Central Committee (at Cassel) the local stores are entrusted, not to “managers,” whose competency would call for good salaries, but to simple “caretakers,” who have no responsibility in the disposal, except to attend well to the corn in their keeping and obey orders from headquarters. The real management is centered at Cassel. That appreciably reduces the annual out-goings. Otherwise the Bavarian system appears more in keeping with our presumable wants. For, whereas Hesse has five stores, costing severally from £3,000 to £4,350, Bavaria possesses (to a much larger area) as many as 105, only four of which cost more than £3,000, only eighteen of which more than £2,000, and the cost of some of which goes down to as little as £75. Thirty-six keep below £600. Those stores are well distributed all over the country, at carefully selected points, where delivery is easy for members, but also removal, by railways communicating with the store.

The governing principle in all this arrangement may be said to be this:—focus expert management at a central point, but bring your storehouses, unpretending as they may be, near to your members, so that they can deliver without trouble; provide whatever in the shape of machinery or appliances is wanted, but keep down management expenses. And, lastly, it may be added: operate cautiously, avoiding such speculative trading as

has wrecked more Government-assisted "cornhouses" than one and has led the Raiffeisen Union from sheer misapplied "co-operative solidarity" into heavy loss in Alsace. That is a principle which promises to suit our own circumstances well.

The presence among us of so many well endowed co-operative distributive societies, with mills and bakeries attached to them, ought to render the work easier. Why go so far afield as to Canada, as has been suggested to the Scottish Co-operative Wholesale Society, to buy land there for growing its own corn—a business not without risk—when there is British land under co-operative small men's occupation to make tributary to these milling establishments? In Germany some grain stores have their own mills—some even bakeries—in order to carry the process of collectively turning their produce to the best account further. We have no need to think of such combinations. And both co-operative milling and co-operative baking appear to be less risky and more remunerative in the hands of distributive societies, which have the command of a market, than of productive, which have their market still to seek. France is, under the tuition of Germany, setting its hand to co-operative grain storing. It has a special "Permanent Committee" to study the question and promote action. As the number of our own small holders increases it may become time for us to turn our attention to the same subject and enter upon some cautious experiments.

VIII.—DISPOSAL OF LIVE STOCK.

The sale of live stock was one of the last branches of agricultural business to be brought under the sway of Co-operation. I remember sales of single beasts carried out in a co-operative way, undoubtedly to the vendors' advantage, but in what must now be considered an only desultory manner—for instance, by the *Syndicat Central* of Paris—in the early nineties. But, if we except Danish bacon curing, which stands on a separate footing, and which was first under pressure, taken up on co-operative lines in 1888, probably the formation of the live stock sale society of Barnstorf, in Hanover, in 1896, was the first methodised attempt to bring the "One for All and All for One" to the relief of the rather badly treated producer of butcher's meat.

And yet no branch of agricultural business may be held to have required assistance from Co-operation more. We are, in this country, in respect of such sale, in comparison with our neighbours, in a peculiarly favoured position. A recent Departmental Committee has reported that there is no ground whatever for any apprehension on the score of overpowering combination among dealers in the meat trade. Even the much dreaded American "Beef Trust" has been shown to have been more of a bogie than a reality. Accordingly we cannot understand what it is for the meat market to have become, as it has in protectionist Germany, the special preserve of small rings of great capitalists operating with enormous funds, who hold all the business in their hands, placing subordinate intermediaries—with freedom left to them to "whop their

own nigger," that is, to levy toll at will upon their victims—in subjection to themselves, and preying unmercifully upon the farmer who had fondly flattered himself that Protection, and the prohibition of meat imports from outside, would secure to him an earthly Elysium. It was the top trade which skimmed the cream off the protectionist milk—the particular stratum of the trade which is by nature the most inimical to the farmer. The farmer's old familiar friend, the local butcher, who bought live stock without an intermediary, as he required it for his shop, was crowded out. Co-operation is bringing him back now, to his own and to the farmer's relief. It was the petty, over-reaching dealer, who was, as a henchman to the substantial trader, let loose upon the farmer, with his wiles and his tricks, who worried the farmer most. The farmer must under any circumstances find himself unequally matched against such dealer. He is not himself, in the trading sense, an expert in meat or cattle. He knows nothing about the actual state of the markets, which requires studying. He hears vague rumours about good prices or bad prices. But he has no certain knowledge—above all things not the small man, who fattens his pig or two, which are to repay what to him represents fair outlay. He does not always know at what precise time to kill, so as not either to underfatten, at a loss of money; or to overfatten, at a waste of keep. No more is he certain what particular market he had best send to. In any case, though he may occasionally over-rate the value of his poor stock, he is more apt to undervalue his best animals, those upon which he ought to make the best profit. An authority in Germany has laid it down that he generally sells them at only three-fourths of their real value. A large farmer fattens six or twelve or more animals at a time. They mature unequally. Is he to sell the immature with the mature? Or is he to face

the trouble of sending again and again? Co-operation steps in to take the sending off his hands and make up a truckful worth dispatching to the market. It reduces the expense and places the sale in expert hands. The man who sells for him knows the market and is fully aware what to do and what not to do. The surest proof of Co-operation having in this application shown itself a success is this, that in Germany—which has thus far experimented most largely in the matter, and in a particularly searching way, and which does the most voluminous business—it is found that nowhere has co-operative sale of live stock been taken up, but the number of live stock kept for marketing purposes in the district has appreciably increased.

It is not indeed in the sale of fat stock only that Co-operation can bring the farmer needed help. When we come to consider the Live Stock Improvement Associations of Switzerland, we shall find that it may render exceedingly useful service also in the sale of breeding animals, to be sold as pedigree beasts, as being raised in co-operative pedigree herds. In a lesser, but still highly useful degree, it can render the same service to the ordinary farmer who desires to sell store cattle—or it may be, animals for breeding purposes, though not of a co-operative herd—bred or not bred by himself. The German Central Live Stock Sale Association (*Zentralviehstelle*) at Berlin—which aims at focussing the entire trade of the country—actually owns a Lean Stock Market of about sixty-seven acres, the largest lean stock market in Germany, through which a very large number of lean beasts pass every week—some 11,000 truckfuls in the year—to the benefit alike of buyers and sellers. It also executes orders in large number for live stock of all kinds, required either for store or for breeding purposes, by farmers all over the empire. This is in Germany a matter of breed, not

of particular strains of blood. There are no "Duchesses" or "Bates" or "Booths," but Bavarian bullocks for draught purposes or for fattening; also Angeln cows, or Swiss or Frisian or Dutch; Yorkshire sows or Suffolk or Berkshire; Southdown sheep or Hampshire or Rambouillet. The Central Association has its representatives in the principal centres, experts in their own particular line, and executes the orders which it receives to satisfaction.

The first branch of this particular business, however, to be systematically taken up on co-operative lines was that of the conversion of pork into bacon. For reasons which scarcely require to be explained the main selling business thus far carried on, generally speaking, whether for sale or for curing, has been in pigs. Alike in our own country and in Germany and Austria—which do a far bigger business than ourselves—it is pigs which figure out and out most largely in co-operative trade. Pigs are most generally kept. Everybody in fact rears pigs. They are "the small man's moneybox." They are reared to sell. And pigs mature most rapidly. They turn over the money the most expeditiously. The trade in them is also the easiest to organise. Trade in pigs is accordingly that for which, more specifically among the adherents of Co-operation, that is, among small men—who in Germany own 93 per cent. of the pigs existing—there is the steadiest and largest demand. It involves least risk and affords the largest promise of success. For under our western sun everybody eats pig.

However in Denmark—in that pioneer country of Agricultural Co-operation, which, defending itself against Germany, set the example in this matter—there were special reasons for taking up bacon curing of all things. Denmark has long been, in a minor way, a pig rearing country. It possesses large forests, into which its pigs, of the two aboriginal breeds—the long-legged high-backed

Jutland breed and the short, square and squat species of the Islands—used to be sent for mast. And a fair number of pigs were sold alive into Germany, which up to 1879 took practically all Denmark's spare agricultural produce. Some such pigs were at Hamburg converted into bacon for our eating. There were only very few bacon curing establishments in Denmark itself, and those were in private hands. The first co-operative factory was set up in 1887. In 1888, like a bolt from the blue, Germany closed her frontier against Danish pigs. Denmark's market was gone. However, Co-operation had already taught Danes a lesson and instructed them how to parry such blow. There was England to fall back upon! However, England could not do with live pigs; nor could such well be sent all the distance in great numbers. So pigs must needs be converted into bacon, for which England offered an insatiable market, but one in which quality was particularly prized. Dairies and egg factories had trained Danes to acting together; and act together they did in this new instance with a will. The rapidity with which the Danes accommodated themselves to the new situation, in fact—so Dr. Hollmann, agricultural attaché to the German Consulate General at Copenhagen, has reported to his Government—was truly remarkable. In comparatively "no time" eight substantial co-operative bacon factories had been set up, for building which the banks readily advanced the money, the trustworthiness of Danish co-operative societies as borrowers being already established. Organisation presented no difficulties. For farmers were quite willing to fall into line, to give a ten years' undertaking to supply all their pigs—in some few cases at any rate two-thirds of them—and to pledge their unlimited liability—for shares there were none—for repayment of the debt within the space of ten years. Also expert managers were readily found.

However, that was not all that was required. The English market was willing to pay for quality, but quality it must have, and also uniformity. The old long-legged pigs would no longer do. There must be boars of the large white Yorkshire breed, to make the bacon acceptable to English palates. Dr. Hollmann once more remarks upon the wonderful rapidity with which the change from pure Danish to crossbred was brought about. What agricultural societies, live stock improvement societies, control societies, and even Government authorities had laboured for in vain for years back, and what private bacon curers, buying their pigs from unorganised Agriculture, could never accomplish, was brought about "in the turning of one's hand" (*im Handumdrehen*) by the magic of Co-operation, simply because it was made the farmers' interest that it should be so and the authority of the many over each one proved irresistible. Uniformity was established—not of breed alone, nor of quality of bacon, but even of size and weight of animals. The general weight is 130 lbs. (about 133 lbs. avoirdupois)—which is less by nearly 35 lbs. than what we favour in this country. And the breed is a cross between the native pig with the large white Yorkshire breed, which is found to be the best combination, exactly suiting the British palate. However such crossing, so it has likewise been discovered, cannot be carried on indefinitely. The crossbred sow, when used for breeding from, runs short of milk, and there is also excessive mortality among its offspring. Also, too much Yorkshire blood produces an excess of fat. (For the curing of such degenerate animals there is a separate co-operative bacon factory at Copenhagen, the bacon of which does not go to England.) Accordingly every new generation is crossbred afresh. To make sure of quality, which alone can command a market, apart from periodical surprise examinations—as a rule four times a year—

Danish co-operators introduced the principle, new at that time to Denmark, of payment according to quality. That, coupled with the uniformity of breed established, the discipline practicable with regard to members, and federation to one union—which centralises business and focusses orders and information—has to a certain extent beaten the private factories (which at the outset, with their superior capital, constituted a very formidable hindrance) out of the field and certainly placed co-operative factories at a distinct advantage. This accounts for the fact that at the present time, out of fifty odd bacon factories existing in Denmark, as many as thirty-eight, disposing of 64 per cent. of pigs brought to the slaughter houses, are co-operative.

Very correctly does Dr. Hollmann point out that uniformity and quality are bound to have such effect, more particularly in a rather fastidious market like the English. "A large quantity of goods of a known and determinable quality," so he says, "supplied with steadiness, is at all times sure to triumph over a medley of heterogeneous products offered for sale by an unorganised host of sellers. Whoever can succeed in establishing uniformity and quality is bound to remain master. His name will by itself sell his goods, because the public accepts that name as a guarantee of quality such as it knows." These are very sound principles which cannot be too strongly impressed upon co-operators.

Co-operative bacon curing has proved a very godsend to Denmark and to its Agriculture. Whereas in the period 1879-1882 only 2,800,000 kilos of bacon were exported, the figure for the quadrennium 1906-1909 was 94,300,000 kilos; and bacon has, together with butter, become one of the main articles of Danish exportation. Concurrently the number of live pigs exported has gone down from 235,100 to 225. Of course the number of pigs

kept in the country has increased enormously, namely, from 527,400 in 1881 to 1,466,800 in 1908. In 1909 co-operative pig fatteners were paid by the factories 92,000,000 crowns (£5,098,333), for their pigs, 1,362,500 in number, that is, at the rate of about £3 per animal, in addition to which 25,700 cattle were killed for exportation.

One would say that here certainly is an example that we—being the consumers of that bacon, which at present the Danes, from no philanthropic motive produce for us, and having therefore the lesson of their success brought impressively before our eyes—would not be slow to follow. We have got the market, we have got the pigs, and we have everything that goes towards making efficient factories—except organisation. Given adequate expert management, touch among members and a sufficient, and sufficiently steady, supply of pigs to keep the factory fully employed, there appears to be no more promising opening for enterprise in that Agriculture of ours, the supposed bankruptcy of which forms the subject of our pet complaints. Our importation of foreign bacon is considerable. Of course there are timid people who see phantom lions in the way at every turn. Something like fifteen years ago there was a project on foot for starting a co-operative bacon factory in the East Riding. Consulted by me, a leading dealer in bacon in London emphatically disadvised me. There was no money in it. Pork was then fully as dear as bacon—but of course pork would not keep as bacon would. And there was such marked difference in the tastes of different markets that, unless we knew positively which particular market we were about to cure for, we should find ourselves producing what nobody wanted. That sounds exceedingly plausible. However, Roscrea—our only co-operative bacon factory at present at work—a typical small farmers' factory, with about 2,800 members, was established in 1908, and by

dint of turning out good bacon, with a characteristic flavour, it has secured a market at once, which it might readily have extended, had it been financially equal to larger production. Practically the same thing happened when the Co-operative Wholesale Society took up bacon curing on its own account—at Tralee, in Ireland, and at Herning, in Denmark. Members of some local societies turned up their noses at the new article. They were used to their old Wiltshire brand. In one small local store, to state a concrete instance, the sale went down from thirteen sides a week to three. But it has all come right after very little time. After all, good bacon is good bacon, and the human palate is adaptable. "Wherever sufficient support with raw material can be made sure of," so we may judge with Mr. Loudon M. Douglas (Lecturer on the Meat Industry, Edinburgh and East of Scotland College of Agriculture), that "with a sufficient capital success may be assured, as by modern methods it is possible to realise high prices for home-cured bacon, and at the same time to utilise all the by-products which arise in such a factory."

There are in our case no special hindrances in the way. There is no occasion here to go into technical details of co-operative bacon curing, which are precisely the same as in non-co-operative. There are other books to give, as it happens, very full information upon this point. But what is done at Roscrea and at Tralee may be done elsewhere.

Co-operative organisation ought by this time to come as "natural" to us as it did to the Danes in 1888. There *must* be expert management. "But for such management a degree of skill will be sufficient such as may without great difficulty be procured. As societies multiply, federation will come in and be equal to more perfected knowledge. On the lower grade such superior skill may be useful, but it is not indispensable. A manager will

however, have to be conversant with all the rules of curing, keeping and marketing, and be able to distinguish a sound pig from a diseased one, also to recommend the best breeds.

To insure an adequate and steady supply of pigs there must necessarily be a sufficiently large constituency and an obligation laid upon members to deliver all sound pigs that they rear and do not require for their own use, so as to keep the factory steadily employed. We are not likely to want to compete in volume of business with private factories either in this country, where frequently 2,000 pigs are killed in a week, or, much less, with those monster slaughter houses in the United States, where five or six thousand animals are sometimes dispatched in a day. Roscrea can manage 750 pigs a week. A similar capacity will probably suit most cases likely to arise. In Denmark only two factories kill more than 100,000 pigs a year; there are ten which kill only between 10,000 and 20,000. Of course the larger the factory the greater will be the possible economy—but also the greater the risk in case of irregular supply. The size of the factory is to a large extent a question of the presence of funds, but also of the suitability of the district. Under the latter heading we shall have to consider the facilities prevailing for procuring skim milk. Bacon factories have thriven so well in Denmark, and multiplied so fast, because there were co-operative dairies there before them, to provide the separated milk for the maturing pigs, for which such milk is the best fattening food. We are not yet so happily situated in this country. But one may hope that the time is not far distant when we too shall have the milk pail well within reach of the sty. The demand upon members' purses need not be excessive. For experience has taught us that costly buildings with substantial walls are not necessary. Concrete and corrugated iron will fully answer the purpose. And with

proper and compact arrangement—which must be a prime consideration, to economise labour and expedite work—all that is needed may be crowded into very limited space. But, unlike the Danes, we shall probably have to provide at any rate a fair proportion of the money required for ourselves. Roscrea was started with an authorised capital of £15,000, of which not quite £12,000 was subscribed. Out of that sum something like £7,000 went into the buildings. That left, as was found, rather too little for working capital. However, that was a matter of only a couple of thousands or so.

Compulsory delivery by members it will scarcely be possible to do without. But we may, in case of need, supplement members' delivery by purchase from outsiders, which indeed in not a few factories in Germany is forbidden, to prevent members making a business of supply. But in Denmark seven co-operative factories make a practice of buying pigs in addition to those delivered by members. Such practice should, if possible, be used as a means of increasing membership by attracting those who, as mere sellers of pigs, cannot be allowed to share in the full benefits derivable.

Provision should, if possible, be made for payment of the major portion of the value of the pigs on delivery, because small people want the money, and cash payment is the bait by which dealers succeed best in luring away members from their society—even though the rebate deducted be heavy. Once we have co-operative banks of sufficient financial power there ought to be no difficulty about this. But even without them there ought to be means of raising the requisite cash.

If the bacon turned out be good, it may be held that a market will be found, even without counting upon purchases by our Stores, which are at all times willing to buy a good article at a reasonable price from a co-operative

source. The further the movement extends, the more closely its units unite, to form a strong central organisation, the better assured will a good sale be.

The organisation of the sale of live animals presents more serious difficulties, because the article to be disposed of is a far more delicate one to handle, liable to a variety of accidents and of damage, not altogether easy to move, and of less readily determinable value. However, to Agriculture as a general interest it may be taken to be of even greater importance than bacon curing. For a co-operative bacon factory is not practicable in every locality and there is plenty more live stock to be disposed of besides pigs.

Although we have not in this country yet operated in anything like the same extensive and carefully methodised way as our neighbours, more specifically in Germany, we have, on the other hand, unquestionably in the province referred to some very fair successes to show, which go far to prove, not only that Co-operation of this sort is feasible among us, but also that we have already taken up the matter on the right lines. With regard to this business our position is distinctly different from that of the Germans. Our various local markets for live stock differ less among themselves than do those of Germany—say of Eastern Prussia, on the one hand, and of the metropolitan area or the manufacturing West, on the other. We have not, and—as the Departmental Committee already referred to has reported—we are in no danger of having, the rule of “rings” or “trusts,” which forms the standing crux of German marketing. The standing complaint in Germany is that the markets are absolutely governed by small groups of “kommissionärs,” wielding enormous influence by reason of their huge capitals and their acting in unison among themselves, reducing everybody else in the trade to subjection. Our markets

are freer. They are more uniform. There is not that variety of breeds and, more serious than breeds, of regimen of rearing and feeding cattle brought to the market; and there is not anything like the same variety of differing tastes, which requires markets lying close together, seemingly in precisely similar conditions, such as Essen and Cologne, Mayence and Frankfort, to be quite differently catered for. And we are broken in to simple methods of business, which suit our case better than the rather elaborate arrangements which appear to be necessary in Germany. We do not need those arrangements; but they are all the same worth studying, because they indicate tendencies which are likely to assert themselves and to be essentially the same everywhere, although they may not everywhere be equally pronounced, and which want to be guarded against.

The object of the co-operative organisation of the sale of live stock is not, of course, to enable a farmer to get rid, as a quite occasional occurrence, of a beast here and there. It is to provide a regular, permanent and trustworthy market for farm stock, under favourable conditions, independently of the intermediaries' trade. There is to be material benefit, there is to be certainty of sale, and there is to be full independence. The ideal satisfaction of such requirement is on the lines of that which our Winchester Co-operative Auction Market and Southern Counties Agricultural and Horsham and District Agricultural Societies provide in their independent markets and periodical sales. The German federated live stock sale societies, and more particularly the Central Sale Society of Berlin, accomplish the same thing on a much larger scale but practically on the same lines—apart from the great Lean Stock Market already mentioned—in their various *Geschäftsstellen* (sale offices) organised in all the principal live stock markets, which secure to their mem-

bers a recognised *locus standi* in each particular market, while permitting them to benefit by the concourse of promiscuous buyers which such market gathers together. Such *Geschäftsstellen* are found exceedingly useful; and the further the network which they already compose is extended, the more secure must become the hold which Agricultural Co-operation acquires over the German meat market. Their officers may not be able to act directly as salesmen or brokers. These markets have their own rules. Members sending may have, as before, to employ a "kommissionär" or agent for that particular business. But the *Geschäftsstellen* watch vigilantly and understandingly over that agent. They collect and telegraphically forward information, so that at headquarters, and indeed at every station occupied by the society, the condition and prospects of all particular markets become fully known. They assist members with advice as to the choice of a market and of the most favourable time for selling. And they look after the animals and see that nothing is omitted which may contribute to their health and safety. There could be no better means of assisting the farmer wishful to sell live stock.

However, independent markets or sale offices are not everywhere practicable. And the Eastern Counties Farmers' Co-operative Association must be judged to have acted perfectly right in organising their own, by this time very substantial trade in live stock, rather on "agency" lines, affording members expert advice and skilled service, without binding themselves to any particular market.

These are, in fact, the two principles on which we now proceed in this country. And in respect of either we have already very encouraging results to show, such as may be held likely to stimulate farmers elsewhere to imitation. The salient feature in the help given by the Eastern Counties Farmers' Co-operative Association is the skilled

service, in the Winchester and Winchcombe system the advantages of centralisation. According to the principle practised has been the area occupied for transactions. A small local society may very well assist a member to get rid of an occasional beast or two to better advantage than by sale to a dealer. And acting as a unit in a federation it may contribute according to its powers to the trade of the latter and correspondingly share in its benefits. But for acting by itself a small society is in this matter a mistake. It could not ensure a sufficient supply; it could not assert itself in the market. There have been small societies formed in Germany, and they have all had to be wound up. On the other hand, a great national society, like that at Berlin, acting for the whole of Germany, cannot from headquarters give trustworthy advice, because the things that it has to deal with are too far distant from it and beyond its direct ken. It is in a position to know how business is going in this market or that, where there is likely to be excess of supply or excess of demand—rather an important matter in Germany, where there are “cattle banks” formed, ostensibly to assist sellers, but which often enough deliberately overcrowd markets in order to depress prices in the buyers’ interest. But they do not know enough about the beasts to be offered, nor, in consequence, about the nearest proper market. Wherever the matter is well organised, through local societies and centres, for districts not excessively large, the trade may become so far perfected that, as happens occasionally in Hanover, beasts may be bought unseen—from known parties, and subject, of course, to weighing and examination. But in such organisations, to make sure of an adequate supply, the old rule of compulsory sale is enforced—at any rate with respect to pigs. Societies which have tried to do without the safeguard of compulsion have found their supply dwindling, owing to

dealers' successful artifices, and have eventually had to wind up. Markets like those of Southampton and of Winchester, and periodical sales like those at Alresford, Overton and Horsham, create their own extendible districts. The Eastern Counties Farmers' Association—whose sales amounted in 1910 to £118,105, apart from a regular supply of live stock, under a permanent arrangement, to the Leicester Distributive Society—covers an area which may be fully trusted to supply a sufficient number of beasts. The service which it renders to members consists in the placing of expert assistance (which only Co-operation can provide for the single farmer, whose business by itself would not warrant the expense) at their disposal, in the first place for advice as to the most suitable market, and next, for assisting them with skilled knowledge of the trade in the sale.

German societies go a good deal further. Their area is as a rule more restricted than that of the Eastern Counties Association, which covers portions of three counties. Their ideal area is something corresponding to a petty sessional division. But then they are federated among themselves and have central societies above them, so that there is a perfect network of stations and a well organised system. That enables the various societies—more particularly where there are "sale offices"—to keep one another informed and to come to one another's assistance. The Central Society at Berlin, which now numbers about 2,200 members (more than 150 being societies), has a well regulated service of information extending all over the Empire. Its acknowledged aim is to become the recognised central organ for the entire co-operative live stock trade—with a view, of course, since Agrarianism continues in the ascendant, of influencing prices generally. This it affirms it will be able to do as soon as at any rate one-third of the entire live stock trade becomes focussed

in its hands. Meanwhile it centralises the bulk of what co-operative business there is. Apart from its business in its own Lean Stock Market, in which in 1910 59,570 head of full-grown cattle, 11,212 calves, 173,651 pigs, 2,010,300 geese, and 141,239 other poultry were disposed of, its annual sales amount to over a million sterling. Its services in the Berlin Fat Stock Market are truly invaluable. For it has an officer stationed there who, besides being a well skilled expert, is acquainted with every buyer or butcher coming to the market, and knows his peculiar line of business well. In consequence he is admirably qualified to refer farmers in respect of every beast offered at once to the most promising quarter. As regards local societies, each such society has its own expert selected by itself, who is now precluded by rule from doing business for any one else—as well as the necessary attendants. Well considered arrangements are made to practise economy in the forwarding of beasts to market by employing reserved trucks, which are always carefully filled up. To ensure a place in such, the intending vendor is accordingly required to give five or six days' notice. Since the expert is pretty well acquainted with the state of affairs in his own district, he is in a position, should there be too many beasts for the truck or trucks, to delay the dispatch of the overplus by timely message to its owner until the next week, or, in case of insufficiency, to hurry up a few more beasts that are known to be practically ready. One part of the advice that the expert is called upon to give is to tell farmers when they ought to sell, so as not to lose money by offering underfatted animals, nor to waste keep by overfattening them. However the truck must be filled up, if possible. Under circumstances non-members' animals are allowed in the same truck, but not at quite the same reduction of cost. The animals sold consist (as in our Eastern Counties) for the most part of pigs,

with calves—veal being a common meat food in Germany where it is killed earlier and is therefore more digestible than in this country—bringing up a good second, more particularly in such regions as Pomerania, where a distinct feature is made of fattening calves. The binding obligation to sell all animals available for sale already referred to—apart from an exemption generally permitted in respect of neat stock, and a year of grace frequently accorded to newly joining members (of whom it is assumed that they may possibly have standing contracts with dealers not to be at once broken off)—leaves two loopholes : in favour of unsound animals, which are, of course, summarily rejected ; and in favour also of animals to be disposed of, under the observance of necessary safeguards, to some local butcher for local sale.

That suggests a new subject for consideration. At the outset of the movement German farmers showed themselves exceedingly ambitious and enterprising. Out of temper as they were with the entire condition of the market, they would make a clean sweep of all intermediaries, down to the hapless butcher who, like themselves, was more sinned against than sinning, having been brought under capitalist thralldom. Accordingly they boldly set up slaughter houses for themselves—which failed ignominiously, as indeed they were bound to do for reasons already stated. The late Oeconomierath Rehfeld, speaking as an "Agrarian," lays the blame for such miscarriage—which unhappy result no one attempts to call in question—upon what he supposes to be the unreasoning, spiteful hatred of urban populations of "Agrarians," who had carried the prohibition of the importation of meat or live stock in Parliament. But the results have been precisely the same wherever butchering by producers has been attempted. Thus, the experiment made, under the most favourable conditions conceivable, by the Vienna *Vieh-*

marktkasse, organised under municipal authority, proved a dead failure. Wherever favourable results have been reported, such have proved to be purely ephemeral and to have applied to only a very small number of beasts. It was bound to be so. For farmers are in this matter *producers*, in a position which may be compared to that of manufacturers in industry. Their business is to supply the material and place it on the market. Retail trade lies altogether outside their province and is beyond their capacity. And butchers' business, of all others, does not and cannot lend itself to wholesale practise. You may kill wholesale, and sell to the retailers wholesale: you cannot come into touch with the ultimate consumer otherwise than by retail dealing. The Danish bacon curers never fell into the mistake of attempting butchering. They never sell less than a side of bacon, and leave all retail trade to the butchers, who are accordingly their friends. There is some farmers' butchering going on in Sweden. But even there, as in Denmark—where bullocks and calves are slaughtered as well as pigs, though in much smaller number—the main part of the slaughtering business practised is that for exportation. The Germans learnt a lesson from painful but wholesome experience, and in consequence abandoned butchering, which had the effect of bringing the local butchers into line with them once more and converting them into friends and allies. Indeed, there are also some small dealers already who have attached themselves to the side of the co-operating farmers. Of course dealers are very welcome to buy; but their purchases have as a rule to be made from *the society*, or in the open market. Local butchers are permitted to buy straight from local producers, but only after binding themselves in heavy penalties not to pass on the animal purchased to anyone else, just as members are made liable to heavy fines should they sell otherwise than to their society.

Sales are under the German system effected in three different ways, which are now narrowing down to two. The most reasonable, and also the most "co-operative," is that of mere "agency," as the Eastern Counties Farmers term it, the society forwarding the animal to the market, at the owner's risk and expense—both being kept at a minimum by Co-operation and care—and debiting him with the outgoings and a commission. In Western Germany, where people have become familiarised with business methods, that is the largely predominating practice. "Members simply send us their beasts to do the best with that we can." So one of the directors of the Central Sale Society (*Viehzentrale*) at Berlin has explained. And that method is always kept open to members to fall back upon, should the others not meet with their approval.

However, in the less developed East, more particularly at the outset, farmers winced at this novel method of selling. They had been accustomed to sell for cash and have done with it. Of course, in virtue of established financial facilities, a sale society may well make an advance on the security of the animal taken for sale. But that was not enough for our Borussians. They would have the beast sold out and out, for a price to be agreed upon. That has been done; and seemingly without evil results; but it is not really good practice. There is risk in it, such as a co-operative society has no business to incur. Also it can scarcely be held to be to the selling member's advantage. For to him the society becomes as a dealer, with interests of its own, and contingencies to be guarded against, which is just what ought not to be. The society cannot under such circumstances afford to give the member the full price for his beast; there are risks to be taken into account and it must make sure of being on the safe side. It cannot tax its other members in favour of

one. There are bad markets, and there may be accidents. And nobody can expect the vendor's neighbours to take the risk of these.

Accordingly this antiquated method has now generally given place to a new one, which is something between a sale and agency. Rebates upon the latest Berlin prices are fixed for every local centre, allowing for carriage and outgoings, all of which may be calculated beforehand. The proportion to be deducted is posted up at the local office, in order that members—referring to the latest quoted price of Berlin or some other leading market, whichever may be selected—may know exactly how much less they will receive. But that is not all. The Berlin prices are quoted for beasts of various qualities. The animals offered for sale have accordingly to be placed in their several categories. This is the local agent's business. But should his valuation not give satisfaction, the owner—who is expected to be on the spot to see his animal into the truck, if it be of the bovine species—has a right to appeal to a deputation from the Committee, which is likewise required to be present. The authority entrusted with this office, when the intervening society is the *Viehzentrale*, are "men of confidence" selected for their expert knowledge. Should the judgment in appeal still fail to give satisfaction, the member remains free to send his animal to market on his own account and at his own risk for simple "agency" sale. Otherwise under this method the risk of transport falls upon the society.

There is one more point which calls for mention. Be the experts as careful as they will, there are bound to be "good markets" and "bad markets," and animals of precisely the same value may accordingly fetch more or less money one week than another. For any one who sends to market frequently that is not likely to make a great difference, since good markets and bad may be

counted upon to balance one another in the long run. But to the man who sells only his one or two pigs, or his one bullock, a bad market must come as a hardship. And Co-operation was intended to bar out such risks as far as possible. To equalise such chances it is not uncommon for societies to fix the final price to be credited to the selling member on the principle on which the Treasury assesses income tax, according to the mean of three successive markets, supposing that the difference in price amounts to at least one pfennig ($\frac{1}{3}$ d.) per German pound.

By such various means a very substantial business has been built up in Germany, for the decided benefit of farmers—and in truth for the benefit not solely of those who avail themselves of the co-operative methods. For market quotations have generally gone up and become more honest. The mere effect of marshalling supply so as to avoid glut on the one hand and deficiency on the other has been noteworthy. Two very striking instances of this may be worth quoting from the practice of the *Viehzentrale*.

In 1902 the butchers and dealers protested that they could not, with the frontier closed, answer for a sufficient supply of meat for the great concourse of people expected to be attracted to Posen by the great Autumn Manœuvres to be attended by the Emperor. Such supply they declared to be "impossible." It was the farmers' "game"—being Agrarians—to show that it was nothing of the sort; for they wanted the frontiers to remain closed and a monopoly secured to homegrown meat. So the *Viehzentrale* offered to provide the necessary live stock. Its offer was accepted. However, it had not carried more than one or two trainloads of pigs to the province before the dealers came to the conclusion that it was after all perfectly "possible" to provide the meat required. Once more, in 1905, there threatened to be a meat famine in

Silesia. There were no pigs to be had for love or money, and the Government was on the very point of consenting to a suspension of the interdict upon importation. Once more the *Viehzentrale* stepped into the breach, and by skilful arrangement managed to bring German pigs to the threatened province in ample numbers. Whatever be thought of the policy of such manoeuvres, the efficacy of efficient marshalling must certainly be counted a point in the score for Co-operation.

But there is more than this. Dealers have to some extent been put upon their good behaviour. "Rings" have been in some measure broken up. And knowledge of the live stock trade has been disseminated. Farmers now know much better than they did what their stock is worth—and get the proper price. There are markets already in which Co-operation is king. The principal of these is of course the Lean Stock Market at Friedrichsfelde, near Berlin, already alluded to, which is, indeed, open to all indiscriminately, sellers as well as buyers, and is largely frequented by outsiders of both orders, but which is under co-operative management, and is therefore exempt from "ring" rule, and fair to all.

Our own achievements have been on a far more modest scale. But they appear to be on the right lines and keep growing from year to year. The Eastern Counties Farmers' Co-operative Association, as already observed, disposes annually of live stock to the value of over £100,000 by agency. Its trade is for the present almost exclusively in pigs; but regular trade in other stock is contemplated. In addition, by standing arrangement with the Leicester Distributive Society, it sends a truckload of about thirty pigs to Leicester every week for consumption by that society. The Southern Counties Agricultural Trading Society at its weekly markets in Southampton sells annually something like £40,000 worth of animals.

Most of the principal buyers of the district now come to its markets. In addition it organises sales at the Alresford and Overton Fairs and sales of store stock at the Spring and Autumn Fairs at Winchester. The Winchcombe Society in 1910 held fifteen sales, at which it disposed of 6,325 head of cattle. For 1909 the figures were: 969 cattle, 3,616 sheep, 1,601 pigs, and 258 calves. Similar sales are coming into vogue elsewhere. In addition the Co-operative Wholesale Society of Manchester has entered upon an experiment, the progress of which it will be interesting to watch, namely, of buying a considerable number of live stock intended for killing, by preference from agricultural co-operative societies, for resale to affiliated distributive societies in the North-East of England, which is part of its most active district. That really is an inversion of the order of business which we have thus far been contemplating. For it is the stepping in of Co-operative Distribution as a middle link between the organised consumer and the organised or else unorganised producer. The value of the process, should it succeed, would be this, that here is a wholesale buyer with practically unlimited means and an assured market for sale, bringing his market up close to the producer. Of course he ought to gain by economy in transit, as buying straight from the farm. One main prospect of success, however, is likely to lie in the development and extension of the organisation of producers who, acting in their several districts, may count upon being able to secure for themselves markets best suited to the goods which they have to offer, open to all the world, but in which they may make sure of fully fair treatment.

IX.—DISPOSAL OF OTHER PRODUCE.

Agricultural soil and the live stock which finds its nourishment upon such, bring forth more produce besides meat and grain, eggs and milk. And as small holdings extend we may expect to see Mother Earth yield a still greater variety of her gifts. For small holdings require varied cultivation. Meanwhile there are the orchard and the market garden, the flax field and the hop plantation, even the riverside and the peatmoss. If we will only take the trouble to look abroad, we shall find what is to ourselves almost a bewildering diversity of productive or improving uses, to which all-fruitful Co-operation has been put with distinct advantage. All these uses are not indeed of a nature to appeal directly to ourselves as models for imitation. In this northern country we grow no vines, nor have we olive yards, or lemon groves or southern flowerbeds, nor do we distil our roots into spirit for the sake of nourishing refuse left, nor, lastly, do we manufacture our cabbages into *choucroite* or *sauerkraut*, as agricultural co-operators do to good purpose in France and in Germany. However, if these particular things are strangers to us, we have other native stems upon which to graft Co-operation as a marketing or improving practice. To single out only one instance—there is no country which excels England in respect of hardy fruit. There are no apples like ours, no strawberries, nor plums to beat those of Evesham. And, jeer as political opponents might at the time at Mr. Gladstone's wise and timely counsel given to English farmers to "grow fruit and make jam," aftertime has amply justified that great statesman's

advice and to some extent demonstrated that, to parody one of the German Emperor's favourite sayings: "The future of our agriculture lies in the orchard." It must have done Mr. Gladstone's shade good—if there is such a thing—to hear last session a member of the whilom carping party ask the Government reproachfully when the promised fruit-growing department would at length be established in the Board of Agriculture? (This has meanwhile been done and promises well.) And how it must have warmed his heart to learn from the Report of the Committee on Fruit Industry (of 1905)—"The fruit industry appears to be a most progressive industry; in fact, it is the *only* form of agriculture which has exhibited any sign of progress in recent years." The breadth of land under every other crop, so the Committee show in detail, has considerably diminished—that under wheat by as much as the difference between 2,564,237 acres in 1888 and 1,375,284 acres in 1904. But the acreage under orchards has increased from 148,221 acres in 1873—a little before Mr. Gladstone tendered his advice—to 243,008 acres in 1904; and land under small fruit from 69,792 acres in 1897 to 77,942 acres in 1904. That leaves vegetables, and garden produce generally, wholly unaccounted for.

The orchard and the garden coming into play stamp the Co-operation here to be spoken of more specifically—though by no means exclusively—as a practice for the small holder, who cannot—as old world sceptics have quite rightly urged—look to butcher's meat and wheat to keep his chimney smoking sufficiently, but will want to set his hand to something with more pains in it, it is true, more personal attention and minute care, hand labour and nursing single plants, but also with more money in it. To a man of this class, though he cannot, for climatic causes, tread in the very footsteps of his foreign exemplars

to be quoted—the co-operative capers growers of Cuges and Rocquevaire, the *immortelles* growers of Trets, the perfume distillers of the Côte d'Azur—their practice will all the same appeal, as showing what Co-operation will accomplish. The hand that picks an orange may pick an apple, and the hoe that crumbles up the soil for rice or capers can loosen it also for beans and peas.

In its application to one or two of the "coming" crops, upon which our agricultural reformers' hearts are set, Co-operation has already been abroad put to a trying test—with varying results. By such example at any rate we may hope to profit.

One such crop is sugar beet, grown for making sugar. (For there is sugar beet also grown for fodder.) There is no occasion here to call into question whether our soil will or will not grow good crops of sugar beet sufficiently rich in saccharine matter to warrant its extraction. Experience has proved that it can. In the opinion of not a few practical farmers experience has also proved that all the same we can in our moist climate turn our land to more profitable account by raising upon it disproportionately heavier crops of mangels. Be that as it may, co-operative sugar beet growing and beetroot sugar making have not abroad proved unqualified successes, albeit at first blush they appear altogether "cut out" for co-operative practice, for the reason already insisted upon, namely, that a substantial stake in cash and enterprise shading off into speculation play too prominent parts in the industry. Co-operation of a sort there must be, no doubt, or there would be no raw material. The support with such from surrounding farms must be made sure of. It is so abroad, down to the very "cow peasant" (*Kühbauer*)—the peasant, that is, who scratches his fertile fields with a plough drawn by his two milchcows, which constitute his only cattle. And these men are allowed something of a say in the

management of the works. However, generally speaking, as in Lord Byron's verse, it is "cash" which "rules the grove—and fells it too, besides, &c." Germany possesses some few beetroot sugar factories registered under the Co-operative Act. But so little are they held to be of a piece with other co-operative societies, that even the all-receptive "Imperial Union" has not received them into its fold. In France, the eight or so co-operative sugar factories existing are understood not to be distinguishing themselves by overgreat success. And the same thing may be said of those in existence in Austria and in the Netherlands. The sugar beet growers' societies in Belgium, which have met with a certain amount of success, are not productive co-operative societies but, in the Italian phrase, "leagues of resistance," having combined to resist being cut down to unfair prices by manufacturers. They have been successful in carrying payments for roots according to quality—that is, yield in sugar—in the place of payment by weight. France rejoices in a climate and a soil which seem marked out for the cultivation of sugar beet, with skill and practice in hand husbandry to support them. And large breadths of that crop are grown accordingly. However, co-operators find that they do better by distilling the roots into spirit—which is, as extracted from sugar beet, one of the purest varieties of spirit put upon the market, fit for use in the manufacture of fine perfumery. And that, again, has put co-operating vine growers in the South upon the *qui vive*. To compete with the northern beetroot distillers they distil their "Aramon" into *eau-de-vie*, which answers well.

During the latest wine "slump" distilling has struck out a new path, to the distinct relief of grape growers, and it is Co-operation which has pointed the way. During good times, elsewhere than in Burgundy and one or two other advanced districts, growers were content to leave

the refuse husks—bulking to the extent of about 12 to 15 kilogrammes to the hectolitre—and the lees produced in wine pressing wholly out of account as so much waste to be thrown away—just as we did oxtails till French prisoners during the "Great War" taught us how to make savoury soup out of them. A period of pronounced slump is however not a time for wasting material, half the weight of which, as it happens, is made up of wine. Accordingly lees and husks are now carefully preserved and turned into the still, where valuable "eau-de-vie-de-marc" is produced out of them to make more money. Apart from the consideration that the utilisation of many little lots of husks necessarily call for Co-operation, Co-operation possesses the twofold advantage of yielding a purer product to the public and at the same time helping producers over the difficulties connected with recent legislation taxing the "bouilleurs de cru." The number of co-operative distilleries for "marc"—which may in other times be turned to account for other distilling—has accordingly considerably increased. Of the produce obtained "Marc de Bourgogne" is particularly prized.

German Co-operation does not distil its sugar beet, but it turns itself loose freely upon that specifically German crop potatoes, to convert their starch into spirit, not altogether, so it must be admitted, of the same superlative degree of purity as beetroot spirit. What the grape is to the Italian, who exclaims despairingly at the sight of his leafy vineyards, that it is all "uva, uva, uva," Drake's western find is to the German. There are potatoes everywhere. They suit the climate and the soil. And they provide a root crop such as is wanted to put the soil in heart, to crumble it to a fine tilth and clean it, a crop that will grow anywhere. There is no less than 43,000,000 tons of potatoes turned out in an average year. And the population does not always quite know what to do with

that quantity. When fortune smiles there is a glut. Accordingly the still is impressed for relief—among other institutions—in more than 200 co-operative establishments. It converts the raw starch into a more valuable product and leaves something—not a little—to go back to the soil through the beasts. Also starch is made out of potatoes—both in Germany and in France—in France more particularly in the Department of the Vosges, near the German frontier. That likewise leaves something for the soil. Where these two industries are practised on co-operative lines small folk are given an opportunity of profiting with their small quantities by an industrial branch of husbandry which for a long time was as a useful resource reserved altogether for the broad aced farmer. The participation of small men is particularly accentuated in Switzerland, where distilling—so far as it is permitted at all, under a law which fixes a maximum of production—is a paying business under the Government monopoly. Even with such help the tremendous mass of potatoes produced in Germany is not to be got rid of. Accordingly people have taken to artificially drying potatoes—they also dry sugar beet tops to keep for fodder—as a means of preserving them without loss through rotting, which under other conditions makes very serious inroad, to the extent of a full ten per cent.—4,300,000 tons in the year. Such drying is practised upon a large and annually increasing scale on co-operative lines, so as to admit small holders to the benefit, and it has been found unquestionably successful. Where carried on co-operatively, potato drying is often combined with some other industry, such as dairying. The potatoes are either cut into slices and baked, or else steamed and passed between highly heated metal rollers, from which they emerge in a flaky form. Such “ flakes ” keep remarkably well and are readily eaten by every species of live stock, including horses, and even

poultry. Horses are said to thrive well upon them. For pigs such potatoes appear, when crushed, to prove ideal fodder, and it has been suggested that they may be made to replace maize. They contain more albumen, so it is urged, than either rye or oats. Quite lately they have even been given as food to human beings.

Co-operation then has a great deal to say to the disposal of root crops.

Another agricultural industry which has of late been much recommended in this country, as promising wealth, and which has been actually taken up with some spirit in Ireland—and which has also already sought for support in co-operative practice—is the cultivation of tobacco. In the United States there is much co-operative marketing of tobacco, and also manufacture of tobacco products. In Europe, rightly enough, Co-operation is more particularly recommended for the stage of preparation of the harvested leaves for the finishing factory. It is in that process that the crux of tobacco growing is found to lie. Large growers are in a position to make their contracts for considerable quantities with tobacco firms. Small men used to be left to the mercy of higglers or agents buying up their small lots—in an unfermented state—below value and without making any difference for better or worse quality. Co-operation has changed all that. It has made Jack as good as his master. And it has done more. It has taught growers to improve and standardise their tobacco and to cultivate on improved lines. This may well be seen in the Grandduchy of Baden—which grows about 45 per cent. of the tobacco raised in Germany altogether—and in the Rhenish Palatinate, into which tobacco growing was first introduced in Germany, by settlers coming from the Netherlands in the seventeenth century. Co-operative societies in those parts have greatly increased the value of their members' crops, at the cost of exercising stern

discipline, the result of which is that they are now composed of the pick of the growers. These men now grow in the main all of them the same variety of tobacco, at any rate in their particular parish—the society supplying the seed—in the same way. By such means uniformity is effectively ensured. The produce studied is a light, fragrant and readily burning leaf. The plants are set more closely together than used to be common, which makes them grow up slimmer and taller. They can accordingly be topped higher up and yield more of the best kind of leaves. The leaves are delivered to the society in three grades of quality and emerge from the fermenting process in six. The society, commanding a substantial supply, is in a position to insist upon price for quality from the factories, with which it deals without intermediary. And growers find that in consequence of this they are better off. They receive more for their tobacco and there is accordingly more inducement to cultivate it. In some parts of Belgium—for instance in the district of Wervicq and in the valley of the Semois, which are both well adapted for tobacco growing—the introduction of that plant (only about thirty years ago) is said to have completely transformed the face of the country, peopling it with small holders, and putting prosperity in the place of want. Tobacco must accordingly be pronounced a crop well suited for the practice of Co-operation.

Hops, on the other hand, of which we still have a fair array to show in our southern and western counties, and which rather badly want a lift, have not responded favourably to the advances made by Co-operation. To some extent the cause may be the same which has stood in the way of uniform success in co-operative wine pressing, such as is much practised abroad. "*Il ne suffit pas d'avoir une bonne machine*," so Léon Say has explained the point; "*il faut aussi avoir un bon mécanicien*." The most favour-

able conditions for Co-operation are of no avail if there is not good management. In respect of such conditions wine has the advantage of hops. For, whereas hops constitute a decidedly speculative and risky crop—risky in yield, risky in demand, and the superlative of risky in fluctuating price—wine of the ordinary table sort—and that is what is mostly produced by co-operating cultivators—forms in wine-drinking countries a staple article of commerce, fairly stable in price and always in demand. Nevertheless we have been furnished with all too ample opportunity of judging what havoc indifferent management and disregard of commercial principles will work even in this promising industry, which has, where rightly practised, within safe limits, doubled the return from grapes to the small grower. To the present day vine growers, acting on safe lines, operating simply to get rid of their produce on better terms, make a good thing of Co-operation, whether it be the pioneers on the Moselle and the Ahr, or the socialist *Vignerons Libres de Maraussen*, who have every reason to be satisfied with the results of their Co-operation. However, Jeshurun waxing fat has kicked—in some cases very badly—over the traces, laying himself out for “rigging” the market and demonstratively challenging the incomparably stronger dealers’ interest to combat. The worst results were of course to be met with where, as in Austria, the State—that is, as a rule there, the Diets—had raised hopes highest by coming to co-operators’ aid with large sums of gift money. However, at bottom co-operative wine pressing is a good practice. Co-operative dealing with hops—we cannot talk of co-operative hop growing—is in a different position. A co-operative society could not itself convert its hops into beer. Therefore it must needs seek for buyers for them. And there are few cases conceivable in which hop growers might find themselves so powerful in the market as to be

able to defy dealers and insist on terms. The world's hop-garden is too large for that. Accordingly terms must be come to with dealers. Now the price of hops fluctuates exceedingly. The aim of Co-operation is to steady price and, if possible, to bind both parties beforehand to a fair figure for the entire season. But that would in this instance have to be a price only for a wholly inadequate quantity. For a grower cannot bind himself to deliver much when he does not know whether he will have any crop to sell; and the dealer cannot bind himself to take a large quantity at a settled price, when he has no opportunity of forming a forecast as to what the current price will be. It is on that shoal that co-operative hop industry in one of its most promising districts, Burgundy, has suffered some damaging experience. And things have not gone much better elsewhere. There have been co-operative hop-growers' societies in rich Alsace, and Belgium has tried to graft them upon its co-operative apparatus, but with little result.

The pressing of olives for oil—in which we can scarcely compete—has answered a great deal better, alike in France and in Austria—to some extent also in Italy. However Italy, with its close upon six millions of acres of olive yards, at the present time still boasts only fourteen known co-operative olive oil presses, situated mainly in the North, whereas France, with only about 300,000 acres, has at least twenty, with more now forming. In Dalmatia the cultivation of the olive, accompanied by co-operative pressing, has fully compensated to the province the loss of its once flourishing output of wine, owing to a succession of mischances—mildew, phylloxera, and the like. In France such societies are to be met with, of course, mainly in Provence and the Languedoc, where something like a hundred farmers will join to press their olives in common after an improved style. Pressing in the old-fashioned

mills, they found the market gliding from them, in favour of the better pressed and refined oils of exotic oleaginous seeds. There are also some such mills in Algeria. The reason why they have succeeded so well—it is true, with some support from the Government, such as in France is scarcely to be evaded—obviously is that olive oil is a staple commodity commanding a fairly steady price.

In Italy small breeders of silk worms have likewise bettered their position by combining to sell their "*bozzoli*" (cocoons) in common. And similar beginnings are now, very tentatively, in progress, in India where, in addition, people are turning their attention to sugar making out of cane—which is an industry of promise in the North-Western provinces—on co-operative lines. Co-operative credit has already been brought to the rescue of rayats for the provision of improved machinery in sugar mills. In the United States, of course, there is much common marketing of cotton, but one cannot unfortunately make fully sure that it is genuinely "co-operative." There are reported to be beginnings also of co-operative selling of cotton by the Egyptian fellaheen.

Flax has thus far proved rather an ungrateful crop to Co-operation. Attempts to utilise it co-operatively have been made both in Ireland and, more particularly, in Austria; however, in both instances, with scarcely encouraging results. One reason, no doubt, is that there has been a succession of bad harvests. However, after due allowance is made for this, there appears to have been something more to stand in the way. It would be unreasonably timid on that account to discontinue experiments. So very much in this matter depends upon the quality of the flax grown, upon its uniformity and observance of the right time, for pulling. One fact adduced as a hindrance, namely, that flax is not a regulation rotation crop, cannot count for much. No ordinary farmer would

grow flax on the same large scale that he does wheat or mangels. But once it was found to pay, he might very well fit it into his rotation on a reduced scale, as regularly occupying part of a field. The main hindrance probably is that cultivation has not been carried on with sufficiently minute care and expert skill. Ireland can scarcely afford to be indifferent to this matter, for it seems particularly marked out for flax growing. At the International Congress upon the cultivation and utilisation of flax held at Cologne only a few months ago, the Chairman, Herr Wallraff, termed it "the cradle" of the industry. A Dutchman of the name of Crommelin first introduced it into Lisburn.

The best known animal textile, on the other hand, that is, wool, has in France—and also in the United States—well rewarded the co-operative pains bestowed upon it. And one may be thankful that a beginning is now to be made in transplanting the same co-operative process into this country, which in good sooth produces quite enough wool to demand attention. With the best market in the world at every producer's door we have to sell our wool cheaply, because we neglect the preparation that that market requires. What sells Colonial wool to so much greater advantage is that it comes upon the market carefully and scientifically sorted, so that every user of it may take his choice. Our British wool is sold in fleeces, or rather in bales of fleeces. That means less money for the good portions, without any addition made for the worse. But when it comes to sorting, small growers of wool—and indeed tolerably large ones, too—have not enough in their modest year's clip to make sorting worth while, let alone that at any rate buyers cannot make sure that the sorting will be done with sufficient skill. Since the year 1900 Dijon boasts for its country, Burgundy—which has close upon 300,000 sheep upon its rich pastures

—a co-operative arrangement—it was originally no more —under which a skilled sorter carefully sorts the wool brought to him at a certain market, selected for that purpose, and sells it accordingly—at very much improved prices, which buyers are glad to give for the sorted article. What used previously to go for 1.80 francs thenceforth fetched 2.20 francs. On the top of this, in 1906 a co-operative society of wool growers was formed, holding its regular wool sales. The capital is provided by 100 francs shares, on which interest is limited to 4 per cent. The society employs a skilled and accredited sorter, who, in consideration of a small fee of $\frac{1}{2}$ d. to 1d. per kilo (about 2 lbs.), does the sorting and marketing. Something similar is done at Rheims and also at Chaumont-sur-Aire, and wool growers taking part in the venture appear satisfied with the results. We are, under the auspices of the Agricultural Organisation Society, to have something similar in this country, which can scarcely fail to answer, if properly managed. Only it comes rather late.

Co-operation, still agricultural, has likewise been called into requisition for the better utilisation of forest and moor products. Who does not know of those wide expanses of monotonous pine forests, left as Nature created rather than planted them, on the partly wet and partly sandy mounds and plains of the "Landes," stretching forth from sunny Arcachon and La Teste, with its nursery of baby oysters supplying most of the oyster beds of Europe with "spawn," towards the Spanish frontier? Those miserable pines, "bled" by continuous scratching for rosin to the whiteness of wool and the inflammability of straw, supply the resinous raw material out of which turpentine is made. There are many comparatively small men owning parts of those forests. These have combined to co-operative societies and now collect and convert their rosin in common. They all gain by it. The principal of the societies so formed sells its 10,000 barrels of rosin in the year.

Germany has turned its attention to a different kind of ligneous product more familiar to ourselves. There are considerable stretches of land in Prussia suited to the cultivation of osiers, to the remunerativeness of which plant our Board of Agriculture has recently called attention. Osier beds have been exploited to advantage in more districts than one of this country by occupants of large farms. But it requires Co-operation to make them profitable also upon a reduced scale for small farmers. To make such osiers more profitable Prussian growers have combined to co-operative societies, more particularly with a view to cheapening the peeling and to facilitate the marketing. There is a considerable sale of osier switches, large quantities of which are annually exported into Sweden. The principal co-operative peeling establishment is at Graudenz.

Another heath product still, on which Co-operation has fastened its sway, is peat. There are large expanses of peat moss in Germany, in Sweden, and perhaps even more in Finland—which lastnamed has, under the guidance of the "Pellervo," become a most "co-operative" country. Much of such area is composed of the properties of small men and, since on small areas peat cannot well be turned systematically to account, these men have combined to dig and work their peat in common, pressing (in Finland mostly cutting) peat cakes out of it, or else converting it into moss litter. In Germany this is a question simply of turning the product to better account. In Finland and Sweden it not unfrequently assumes the importance of a question of providing the small men of a village with the necessary fuel and litter. Accordingly in Finland and Sweden, wherever the villagers have not peat moss of their own, they buy such for common exploitation, taking care to purchase their "moss" near their village. Co-operation admits of the employment of more perfected

machinery and processes of work, as well as of more systematic exploitation of the moss, and in addition, where sale is an object, it greatly facilitates such. Finland in 1909 numbered over fifty co-operative peat-moss societies and the number was then steadily increasing.

Although these lastnamed uses, to which Co-operation has been put, may not appeal to us directly for imitation, they may all the same prove useful as showing the many-sidedness of co-operative practice and suggesting its application to produce more natural to our soil.

Our main business in this connection is, however, likely to lie with the sale of fruit and vegetables—garden produce—generally such as Nature provides for us in abundance and of prized quality, with all the advantages of proximity to our markets in our favour. Those markets are the chosen markets of the world, to which other nations count it a privilege to be able to send their produce—the French railways running special trains, anticipating in point of priority, and now competing in swiftness with, the famous "*Rapide des Fleurs*"—to carry the fruit and *primeurs*, ripened by southern sunshine, to the Channel coast for shipment to us.

Once more, on this ground, in spite of all such facilities and opportunities, we have remained lamentably backward, willingly paying British money for foreign produce, and allowing British acres to remain under unprofitable crops, as if a return from land were immaterial to us. Experts of the fruit trade, heard in the recent Fruit Culture Inquiry, showed to what enormous extent we are in this matter fed from abroad, and complained that British growers will not take the trouble about their fruit which might ensure to them an additional "£30 an acre." France, with its vast Nature-favoured territory turned into a huge vineyard and market garden, by close personal attention, and Belgium with its "intensive" culture—

which utilises even the shale in the soil for ripening grapes and other fruit requiring heat, for which we have to employ glass—have at length become our schoolmasters in this matter. And France, all astir as it is with the rearing of garden produce for exportation, has early discovered the use of Co-operation as the best means of turning its own facilities to account, by bringing, so to put it, profitable “third-class traffic” into the market. In this—to apply Baron Bethmann-Hollweg’s reference to “detail work”—the work of hundreds of thousands of small, in many cases very small, cultivators, sending in their dribblets of produce to grace our own or Parisian tables—combination has proved absolutely indispensable; and, taking the shape of what we know as “Co-operation,” it has produced its usual, beneficent results, to the profit of those co-operating. The mass of produce sent to us—say, only from France—and its variety, are truly remarkable. The first society, I believe—writing from memory—to organise this “*rapide*” wholesale service of entire trains run through from the south to the Channel coast, was the Agricultural Syndicate of Vaucluse, the members of which had strawberries to sell—at the right time. Now there is produce—that is, vegetables and fruit and flowers of every kind—carried across France in astonishing abundance. Paimpol and Dunkirk send their potatoes, Caen its *carottes de Luc*, Trets its *melons verts* and its *immortelles*, Cuges its capers, Rocquevaire its apricot pulp—of which it produces £16,000 worth in the year—Carpentras its strawberries, Groslay its pears and plums, Burgundy its black currants in profusion, Romorantin its asparagus and beans, the Yonne its cherries, all the south, from Perpignan to the Var, its grapes and its flowers—in their natural shape or else distilled to perfumes—Toulouse more specifically its violets. Plougastel-Daoulas (in Brittany) employs two special steamers during the season to supply us, via Plymouth,

with strawberries and pears. Two hundred and fifteen small farmers, comprising a full third of the population of the village, have combined to a co-operative society, which in 1908 sent us 667 tons of such produce of the value of 385,215 francs, out of which 197,656 francs was reckoned to be pure profit. The Hérault, having sought relief for over-cheapness of over-produced wine by cultivating table grapes (*chasselas*), during the season sends up to Paris nightly a special train of from thirty to forty trucks laden with such fruit. At Paris the annual deliveries of fruit from the provinces have increased, by the Orléans line, from 7,572 tons in 1880-89, to 24,834 tons in 1901-08; by the Paris, Lyons and Mediterranean line from 17,130 tons to 34,239. Of the 398,500 tons of fruit (exclusive of lemons, oranges, bananas, grape fruit and the like) that we imported into the United Kingdom in 1908, France supplied no less than 66,500 tons—apples, pears, plums, and the like, that we might have grown for ourselves. And she complains that that is not enough!

One particular branch of fruit culture that is co-operatively exploited to good purpose is that of black currants (*cassis*), which are grown in Burgundy in great abundance and of highly valued aroma. This trade was not long ago entirely in the dealers' hands. And dealers manipulated it to their own profit to the extent of defrauding growers of a good part of what was due to them, and also of terribly unsettling the market. In this, one of the steadiest of fruit crops, with a remarkably steady demand, prices went violently up and down, varying, in 1904, between 8 centimes and 60. This was, as MM. Martin and Martenot explain in their most interesting book "*La Côte d'Or*," "*le résultat de manœuvres de spéculation*." The growers very rightly rebelled against it by combination and direct (collective) sale, well organised on the several markets so as to overcrowd none and yet keep

all supplied. The measure has proved completely successful. Prices have become steady, and the growers receive more money for their fruit.

To push their lucrative export trade, French co-operators have provided cold storage, both in trains and in special dépôts, such as at Montreuil-sous-Bois, Bourg-la-Reine and, on a small scale, at Condrieu (near Lyons), fitted up with special refrigerators made in Alsace, in which dépôts fruit may be safely stored—cherries for fifteen days (after which period the stalks begin to break off), strawberries up to twenty days, apricots for thirty to forty days, peaches, if put in at the right moment, for from forty to fifty days. Grapes will keep for months. With the help of cold storage cars in trains fruit may safely be carried a distance of 1,250 miles. And the expense is small. It is calculated at 1.20 francs for 100 kilogrammes (about 2 cwts.) for thirty days.

And if, on the one hand, the quantity of this produce seems to call for remark, so does, on the other, the minuteness of pains bestowed upon it in its growing stages by small owners on their sometimes tiny garden beds. It is small cultivation perfected, as only Co-operation with its watchful vigilance can perfect it, and massed together for economical transport and profitable sale, as only Co-operation can mass it, which has effected this result. To this fact it is due that the commercial value of the produce raised has been so remarkably increased—at Vallaron, for instance, the price realised for orange blossoms from 0.30 francs to 1.50 and even 2.00 francs.

In France pulp making is extensively practised. Whatever of the enormous mass of fruit there produced cannot be got rid of to Paris, England or Germany, is preserved, and to a great extent made into pulp, which constitutes one of the most useful articles of trade. Pulp-making can be carried out only on a large scale; hence it

distinctly calls for Co-operation. But the installation required for it is not costly. A plant to be purchased for £120 to £160 will suffice for turning out 60 cwts. a day. For making pulp, fruit is sterilised in tins, after the removal of stalks and stems. Roquevaire turns out large quantities of apricot pulp; Dijon, the Côte-d'Or generally, the Bouches-du-Rhône and Vaucluse provide mainly black and red currants, cherries, raspberries, and plums. It seems odd that we should have to fill our store rooms with pulp from foreign parts, when one of our standing complaints is that we cannot find a remunerative market for our own fruit—in its raw state—in this country.

There is more of this same co-operative trade. Switzerland, Belgium, Italy, and also Germany and Austria, have their own tales to tell. Belgium and Holland—with its *tuins*—frighten German growers with their exports into Germany. Switzerland pours its fruit by trainfuls into the "Fatherland." And there are exchanges of grapes, to improve the vintage. Nor does Italy lag behind with its sun-browned grapes and other produce.

In the United States—in which, to accept a statement made by the United States Department of Agriculture, "more than half the National Agriculture, as represented, in altogether 6,100,000 farms, is (let us say, 'more or less') co-operatively organised"—the things done in respect of fruit astonish one by their bigness. The Californian Fruit Growers, having close upon 12,000 members, cultivate, among them, about 120,000 acres, and despatch annually about 15,000,000 boxes of fruit. The Wathen Fruit Growers' Association in 1910 (being then five years old) disposed of about 40,000,000 boxes, equal to about 100 railway truck loads of strawberries alone, in addition to 35,000 boxes of grapes (of which the district as a whole despatched 50,000, showing Co-operation to have secured the lion's share of the trade), 10,000 boxes of raspberries,

20,000 of blackberries, 62,500 baskets of cherries, currants and gooseberries, and 326 truck loads of apples, to the collective value (for apples) of £35,000. Surely here is an example to take to heart! One measure which is said to have contributed very materially to the improvement in the state of the market is the practice adopted of selling fruit by public auction.

There are two points upon which, in connection with this class of industries, we shall do well to fix our attention from the first, the claims of which speak for themselves and the necessity of urging which the recent Inquiry into Fruit Culture has made abundantly clear.

The first is the importance of growing the most marketable produce; the second is the most businesslike organisation of the sale.

How much we err in respect of the first of these two points has been plainly shown by the evidence given in the course of the abovenamed inquiry. "We cannot sell ten bushels hardly of one variety of English fruit. You do not know what you are going to have with English fruit. We cannot get our grocers to keep English apples, because we cannot depend upon keeping up a supply. It is almost impossible to get fresh customers on to English apples."

That mistake has been completely got over in Colonial and United States societies, and also in France. Growers there know on what side their bread is buttered, and they themselves take care to have the butter by cultivating more uniformly and more carefully. This it is, in part, which has made the United States fruit auctions, which are largely responsible for the success obtained, so useful and so easily arranged. "The knowledge of the market," so says an American writer reporting on the fruit industry of the United States in the *Bulletin of the International Institute of Agriculture*, "is not enough; one must also

satisfy its requirements, providing the consumers with the kinds of fruit for which they have a national preference; the fruits supplied must also be of a quality not only good and sound, but uniform and *typical*, so that uniform prices may be established, or prices only varying for large classes." And such study of producing uniform, "typical" fruit is rightly carried further, so as to provide for a *maximum* of uniform and good fruit, "fancy" or "choice," in one "Union." In some Unions in the United States this result has been carried to such a point that 90 per cent. of the fruit delivered comes up to the mark of satisfactory saleableness.

As regards businesslike management, the first point is that of grading.

"The most important part out and out in the matter," so writes M. Raymond Gavoty, a fit spokesman for the French, as being President of the Union of Agricultural Syndicates of the Alps and Provence, "is the very careful grading of goods, the offer of them in a presentable condition and the steady delivery of goods of good quality and strictly uniform."*

The Americans have various gradations, the two topmost of which are "choice" and "fancy," which latter means very carefully selected, one by one, rejecting every fruit that shows the slightest flaw, if it be only a speck of the size of a pin's head upon the peel.

The next point is packing. And in the United States we find that Fruit Growers' Unions have their own skilled and trained, responsible "packers," who manage the business and may be trusted to do this. To make his responsibility effective, every packer is required to stamp his own particular mark upon every

* "La question qui prime tout c'est le triage sévère de la marchandise, la bonne présentation et la régularité d'expédition de produits très uniformes et de bonne qualité."

case or box that he packs, for any faulty condition in which he is subsequently called to account. The packers are paid by the box packed and can easily earn $2\frac{1}{2}$ to 3 dollars a day.

And the third point is the study of the market. The "Peninsular Products Exchange of Maryland" pays something like 10,000 dollars a year on nothing but the collection and diffusion of information as to the condition of the fruit market. But all this has resulted in fruit growers obtaining—in some districts, for instance in the "Hood River Apple Growers' Union"—just double the price that they used to obtain before resort to Co-operation, and in the violent fluctuations of price in earlier times being brought to an end.

The teaching of the markets, the example of our colonial fellow citizens with their huge fruit culture, the example also of such homes of research as Woburn, and the most useful instruction given by Lady Warwick and her competent deputy Miss Edith Bradley, have at length brought the more enlightened among us to understand the value of growing superior qualities of fruit, and growing more or less uniform crops, so as to be able to contract, not indeed for the "100,000 bushels" of uniform fruit that dealers speak of as coming from single firms in the Colonies, but at any rate for large consignments which will furnish supplies for some little time. There is, once more, something like "a rent" between an inferior and mixed apple crop from an old-fashioned farm garden, and the neatly uniform, carefully graded fruit of a superior kind, selected so as to suit the particular soil and site, which comes to us from the Colonies. In that "forest of fruit trees" in the western counties, 76 per cent. of whose produce in apples goes into the cider press, the difference may not be a matter of very great account. Nevertheless, even in cider press-

ing, the quality and sameness of fruit do make a difference—as witness the higher price gladly paid in Germany for the noted “Borsdorf” cider, the “Borsdorf” apple being a favourite variety, in taste rather resembling our “Cox’s Pippins.” And in France, Co-operation is successfully practised for cider-making. For table fruit, however, the mixed, ungraded, probably not even carefully packed lot of apples is not “in it” by the side of better prepared produce. The same thing holds good of other fruit, and of every variety of vegetables. The entire world appears to have come round to the view of “the Colonel” in Swift’s “Polite Conversation,” who modestly protested that “the best was good enough for him.” And there is “money” in studying the taste of customers. In the Agricultural Organisation Society society members have found that after taking our advice to pack their fruit carefully, they netted a better price; and when, on the top of this, they took to grading it, they did better still. And they discover no inclination whatever to revert to their old happy-go-lucky ways—because, as was stated by one highly experienced witness in the Fruit Culture Inquiry, nothing pays better. “The packing of English fruit is by universal testimony exceedingly bad as a rule. It compares most unfavourably with that of foreign and colonial fruit.” And grading alone was shown to make a difference of so many shillings a bushel on the price received for the whole crop, “perhaps representing £30 an acre.”

There is little more required to satisfy our second postulate. For our market is practically everywhere in our country, and ready—in truth, eager—to receive British produce, if offered in good—let us say “habitually good”—condition. And even where a stiff railway tariff opposes an obstacle, Co-operation knows how to overcome that. In connection with this it deserves to be pointed

out that everywhere else, and more particularly in France, even the marked improvement observed in the fruit trade, carried on on a large scale, as practised by co-operative societies, can be distinctly traced to facilities accorded by the Railway Companies. The history of the improvement of the fruit trade, so in substance stated M. Gavoty at the Congress of Evian, is none other than the history of improved railway facilities. Fortunately our Railway Companies seem alive to the value to their shareholders of improved facilities for the traffic referred to and are willing to meet us.

The formation of a society fortunately presents no serious difficulties—provided that the two cardinal conditions can be satisfied of the presence of sufficient, though it be moderate, cash to set the society a going; and also sufficient support to ensure an adequate, regular supply of material.

The amount of money contributed need not be large—unless a society overambitiously lays itself out for costly “depôts.” But there must be some. The society must be able to stand upon its own legs. There may be borrowed money, or money contributed by well wishers who look for no personal benefit beyond a fair rate of interest. But there must be a certain amount of share capital, belonging to participating members; and the more there is of such, the better will the society fare. You cannot rely altogether upon borrowed capital. The scheme of organisation which has become known as that of the “Federated Growers” of Birmingham, has much to recommend it. It makes every member take up at least one £1 share at the outset. After that, in respect of every £50 of produce sold through the society, the member is required to take up another £1 share, until he holds ten in all. That holding entitles him to sell through the society £500 worth of produce per

annum. Out of the profits accruing interest is paid at a rate not exceeding 5 per cent. upon the shares. Of the balance one half is carried to reserve ; and not less than 5 per cent. is paid as bonus to workers ; the remainder may be credited as bonus to members, in proportion to their sales, and to the Industrial Co-operative Society of Birmingham—the support of which, both as a member and as a purchaser, the Committee has wisely bespoken—in proportion to its purchases. Several other societies have already adopted similar rules—no doubt finding that they must bind their members to somewhat substantial payments. Flesh shrinks from such engagement ; but it is necessary to success. The Industrial Society's interest having been enlisted, we have here a case in which the two branches of the co-operative movement make such common cause as by their several positions they appear called upon to make. A distributive society has further means of coming to the productive society's aid without sacrifice to itself. It may provide the hampers required for carriage, the cost of which it may recoup in price, whereas the outlay would weigh heavily upon the infant productive society's slender resources.

Making sure of an adequate and steady supply of produce is not always an easy matter. People are apt to show themselves sceptical. Who knows but they might manage to do better for themselves. There is always the chapter of accidents. At any rate they would not bind themselves altogether. So they hang back. And yet the society *must* have a support that it can rely upon. Wherever a fair nucleus of such support may be counted upon, organisers will not be wrong in beginning, though the first ground to be covered prove a little rough, hoping for recruits to drop in as they move along. But where the support to be obtained

fails to reach such modicum of volume, the proposed society had better not be formed ; for it can do no good. What support it obtains the society must take care to make thoroughly loyal. There have been societies, formed under favourable conditions, shipwrecked because members would play fast and loose with them :—accept an attractive offer from a dealer for their best fruit (or other produce), and then “shoot” the inferior balance upon their society to do with as best it could. A leading Swiss society, which had not exercised sufficient caution, has lost much money by this. Fortunately it was too strong to lose position. But its fruit trade it has not been able to set down as altogether a success. And that mainly, as its historian shows in the published history of the society—the annual Reports tell the same tale—because members were irregular in their deliveries and not loyal in their support, but expected, as it is frankly put, to “make a profit out of their fellow members.” That same society appears to have experienced a further difficulty in being called upon to sell produce of too great variety, so to call it, “bobbery” fruit. In England certainly it is of the utmost importance that of the produce to be offered there should be enough of the same kind to last some little time. It is the uniformity of the produce which sells it. It is not, indeed, to be expected that any society will confine itself exclusively to one particular kind of produce, be it apples or pears or plums, or anything else. Such instances may occur ; and in them business will be pronouncedly “seasonal,” and “seasonal” of the briefest kind. But within the limits of each category the society will do well to study uniformity so as to acquire a reputation for its speciality—which speciality, of course, it should endeavour, after adequate study, to make the most suitable alike to its peculiar conditions and to its market. This is not a question of

apples or pears or plums only, but of specific kinds of such fruit, and equally so of vegetables.

Being grown, the produce ought to be carefully "graded," and well and carefully packed. Both processes are, as has been shown, very generally neglected in this country. And yet success depends upon nothing more than upon their being expertly carried out.

Bringing such produce upon the market opens a new chapter of difficulties. After the failure of the late Lord Winchilsea's ambitious scheme, and of dozens of similar projects attempted abroad, one is sorry to see advocates of Co-operation fall back once more upon the idea of maintaining depôts. The objections to such course have already been set forth. A good producer may—indeed is very likely to—prove a sorry salesman. The way in which a co-operative society should proceed has been very properly and clearly marked out by the Danish Egg, Butter, and Bacon societies. Its aim should be to establish a dominant reputation for quality, to be depended upon, which is sure to command custom such as will be much better ministered to by skilled salesmen other than agricultural co-operators. Brands, trade marks, advertising, appeals to the eye, are all perfectly in place. But it is only in rare instances that co-operative productive societies' shop trade has answered. It is for distributive societies to practise that. Hence the importance of inter-relations.

In this island the Blairgowrie co-operative fruit growers have in respect of the point here urged set an excellent example. They have focussed their business in a centre, which is in communication, by telephone and telegraph, with all the centres for sale and the sources of supply coming into account. At that centre they maintain a dependable skilled manager. And with such help they do just what the Eastern Counties Co-operative Farmers

do with their live stock, that is, they direct the goods from their several producing places to the best suited market, put a skilled agent in charge of them, and so, while avoiding a glut anywhere, secure for their members the highest price that a skilled man can obtain. As time goes on we may expect to do very much more business with the industrial societies. That will be well and good. If some societies choose to take up their position in Covent Garden, like the East Anglian Farmers, or at Birmingham, like the Federated Growers, and offer to act as agents for co-operators elsewhere, one is bound to wish them success. It is for the moment their speculation. Let us hope that out of this offer some well organised federation for business purposes will develop, such as might benefit the co-operative fruit and vegetable trade generally. But for the moment it is a venture. And generally speaking mere agency promises to pay best and involve least expense and risk.

A subject closely allied to fruit growing is that of preserving fruit grown, so as to avoid a glut and at the same time extend the period of sale. Mr. Gladstone recommended "jam." There is no reason why farmers should not combine for the co-operative making of cider or perry, just as they do abroad for pressing their grapes. But the idea of jam occurs most naturally to us jam-eating Britons. We have it on the authority of leading men in the jam trade that the taste for jam is steadily extending. Whatever politicians of a past day may have thought, the public now is "on the side of Mr. Gladstone." There is fruit bottling also, which our Board of Agriculture has singled out for special recommendation. However, there is very little "pulp" made in this country. And yet, there seems not a little call for it. For pulp possesses the good quality of keeping for years; and it is most useful for converting into sugared products. Indeed, our manu-

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facturers of preserves use large quantities of it. Only the great bulk of what they use comes from abroad.

Vegetables likewise will bear preserving. There is indeed plenty of scope for their production and also for their bottling and tinning. We receive such large quantities from abroad! And their cultivation and manufacture lend themselves so very readily to co-operative practice! Why do we not grow more tomatoes? On the Woolwich Society's farm they yielded £90 an acre. There is a French agricultural syndicate—in this instance answering to a co-operative society—which turns out its 1,000 tons annually for the Paris market.

Co-operation has in Great Britain not remained altogether idle or barren on the ground here spoken of. We have, apart from the Blairgowrie Society already mentioned, a very modest array of produce growing co-operative societies also in England, some of which have begun well. Apart from the East Anglian and Birmingham societies already spoken of, there are the Pershore Fruit Market, also the Worthing and District Market Growers' Association. There is a society in Guernsey; there are others in Bromsgrove, Marton in Lancashire, Swanwick, Halstead, Badsey. And a district in Anglesey has, under Lord Boston's lead, converted itself into a second Haarlem, producing, co-operatively, narcissus bulbs and flowers. But the entire movement is still only in its early infancy. And results are, accordingly, restricted. One may hope that now that Agricultural Co-operation has become fashionable, and the Board of Agriculture is making laudable efforts to promote it, this particular branch of it, which, among productive branches, appears to promise the best results, and which is so truly congenial to our circumstances, will be widely taken up and practised.

X.—LIVE STOCK IMPROVEMENT.

Later, generally speaking, than ourselves, foreign nations have learned to appreciate the value of having improved live stock on their farms—live stock which bears a better look, and yields better produce, and sells for a very much better price than the old. But once the lesson was learned, it was well taken to heart and, in a truly democratic way, carried very much further than it has been among our own fine pedigree herds or in our primitive bull and boar societies. Foreign Governments, more especially in Germany and Switzerland, have been in many instances truly lavish in their pains and their pecuniary support, to encourage the improvement of stock of every kind—horses, cattle, sheep, pigs, down to rabbits and goats (which lastnamed are by no means despised as farm stock)—in the main by the employment of well-bred sires distributed over the country, or else by severe limitations in licensing—without which no sire may be employed outside its own stud or herd—and, lastly, by public grants and by prize competitions. And although local patriotism may occasionally have run away with better judgment, as favouring local breeds, where others might have been employed to greater advantage, in any case the value of the stock kept, and its productive capacity, have by such means been enormously augmented.

However, Government assistance alone, so it was soon found, could not accomplish everything in the matter. There must be willing stock owners as well, to take advantage of the help given and, beyond this, to act independently for themselves. Among small folk doing this was

found possible only by means of Co-operation. There must be a number of men to act in common, or the expense would prove crushing and the results disappointing. It is on such grounds that a peculiar type of co-operative societies has been generated abroad, of which we in this country as yet know little, if anything—namely, societies for the improvement of members' live stock of various kinds, by systematic breeding and attention given to females as well as to males, and to their yield as well as to their form, and by the exclusion of faulty specimens from co-operative herds. We have, of course, our stud-book and herdbook societies and the like, and they do excellent work. But their object is not at all the same as that here spoken of. Foreign countries have them likewise. These societies get up shows and prize competitions, and keep genealogical records. But they do not co-operate for economic purposes, enabling the small farmer to take his place as a breeder of pedigree animals by the side of the large one, and thereby to realise greatly increased prices.

That is in itself an answer to the possible objection among ourselves, that in view of the high place that we have conquered, even in the outside world's estimation, by our highly improved breeding, among ourselves similar societies do not seem called for. Our breeding notoriously does stand high. But there are many enough small farmers who, owing to the scantiness of their means, and their want of knowledge, derive no benefit from it. It is these men that co-operative breeding is designed to assist. It makes a world of difference, as we now know, whether a cow or a pig is of good breed or of bad. Also one cannot by any means make sure that our show breeding, even in the wealthy man's yard, is really economically the best, as yielding the best returns. The proof of the cow is in the milking; that of the pig in the fattening. On such

points co-operative rearing is likely to prove more useful than wealthy men's fancy breeding, as being more commonly utilitarian.

It also deserves to be pointed out that Co-operation has a voice for the small man where pure reason and even Government pressure may prove ineffective. An instance of this is what has happened in Eastern Flanders, where the authorities had long fruitlessly done their uttermost to promote improved breeding of cows by means of shows, prizes and attempted compulsion. Their injunction was that every parish should hold an annual show, towards which they freely offered money. There was no response. The small Belgian, like his brother in Sussex, "wun't be druv." Co-operation came on the scene, giving the peasant a motive to will as well as to do, and shows are now regularly held and largely attended, and breeds have in consequence been greatly improved. There is accordingly something to be said for Co-operation.

Practical co-operation in live stock keeping may be said to have begun, not with the breeding but with the purchase of cattle. An early form of this, which has yielded good results, is that of the Thurgau *Viehleihkassen* or *Caisses Thurgoviniennes*, to which I have called attention at greater length elsewhere.* Originating in the Swiss canton of Thurgau, it has quickly spread into some adjoining cantons, where it is found to work equally well. The "co-operative society" in this case is the civil parish—which often enough embraces two or three ecclesiastical parishes and therefore represents a rather substantial body of ratepayers. In a parish meeting these ratepayers decide by vote whether to establish a *Viehleihkasse* or not. If the vote be favourable, they give the cowkeepers in the

* See "The Poor Man's Cow" in the "National Review" of October, 1894, and pp. 396 and 397 in "People's Banks" (Third Edition).

parish the unstinted use of their common credit, in order to enable them—supposing that their application for credit is approved as warranted under the circumstances—adequately to stock their little holding with cows. Such cows in the first instance the parish buys itself, through its officers appointed for the purpose, handing them over afterwards to the applicants and keeping a lien upon them. The officers mentioned have a voice in the selection of each particular cow, which has furthermore to pass an examination by the parish veterinary surgeon and must of course be insured and also well fed, to the satisfaction of the parish authorities, who steadily inspect the keeping. The price is paid off by instalments, which are occasionally spread out over a very long period. The business has proved remarkably safe, and its result has been that two or three cows are now kept where otherwise there would be only one.

Something very similar is practised on a small scale in France. Only there it is agricultural syndicates which provide the necessary money to the extent of four-fifths of the price of the cow, to be made sure by insurance up to the full amount advanced, and to be repaid within four years. This system is said to work well. But of course a Raiffeisen bank could, without special organisation, render precisely the same services as do those specially organised syndicates and the parishes in Switzerland. There is another organisation in operation in France, which is likewise reported to work beneficially. It has for its object, not the buying, but only the lending out of cows to small cultivators who lack the means to buy them. The beasts are lent as in-calf heifers, for the term of three years, to be restored when about to give birth to their fourth calf, at an annual hire of 20 or 30 francs. In the arrondissement of Saint Omer 285 heifers are said to have been lent out in this way since 1908, every one of which was duly restored. No loss whatever has been sustained.

All this, however, is not breeding.

In specifically milk producing countries the marked difference in the yield of milk as between carefully bred and selected cows, on the one hand, and ordinary animals on the other, was bound to attract notice. Accordingly what are now known as "Control Societies"—that is, societies formed, among other objects, for noting down periodically the yield of milk given by each cow—became at an early date a recognised institution in Switzerland. It is from there that they have spread elsewhere. Looking back upon experience collected through a number of years, we are now in a position to draw an instructive comparison. Observations made at the public Dairy School at Rütli, in Switzerland, have shown that under the system of "Control," and of judicious mating, the yield of milk per cow has increased from 2,970 (in 1878) to 3,106 kilogrammes (in 1888) and 3,700 kilogrammes (in 1905), with a maximum yield of 5,656 kilogrammes recorded, as compared with 4,288 kilogrammes in 1878, and 4,363 in 1888. And in the increased quantity of milk—which in itself supplies a powerful argument in favour of improving—the proportion of butterfat, which practically determines the value of the milk, has concurrently gone up from an unknown quantity in 1878 to 3.76 per cent. in 1901 and 3.80 per cent. in 1905. And at the present time 4 per cent. is quite common. The Federation of Red-and-White (Simmenthal) Breeding Societies, whose method is presumably more systematic, have still more telling results to show. Their average has gone up to 3,798 kilogrammes, and their maximum to 5,849 kilogrammes, with 3.85 per cent. butterfat.

Denmark has copied the system of "Control" from Switzerland, and the results in that country have proved no less encouraging. Official figures given in *Coopération dans l'Agriculture en Danemark*, published in 1910, show

that in the interval between 1898 and 1908 the average yield of milk has gone up in Denmark from 2,041 to 2,661 kilogrammes, and among better class types of cattle to 3,000 kilogrammes (660 gallons), and in exceptional cases to 4,500 kilogrammes (990 gallons), and even 6,000 kilogrammes (1,320 gallons). The figures for butterfat are not given.

Once more, in the Netherlands, where there is a heavily milking breed of cattle, the average yield per cow has gone up from 812 gallons in 1897 to 1,019 gallons in 1904. It has declined a little since, but still stands at 898 gallons, with, generally speaking, 3.50 per cent. butterfat, as a mean between the two extremes of 2.90 and 3.70 per cent.—which is satisfactory, considering that the traditional characteristics of Dutch (and also Frisian and Oldenburg) cattle are: much milk but rather thin. To quote one more case, from Germany—at Soldin, in Brandenburg, among 1,017 cows supervised by a Control Society formed in 1907, the average yield of milk per cow was found in 1908 to be 2,661 kilogrammes, with 3.22 per cent. butterfat, producing 95 kilogrammes of butter and a net profit of 108.06 marks per cow. There was a rise in the very next year. And by 1910 the average yield had increased to 2,885 kilogrammes milk, with, it is true, only 3.15 per cent. butterfat, but producing 101 kilogrammes of butter and 132.65 marks net profit, that is, more by 24.59 marks than in 1908, a matter of £1,271 on the 1,017 cows. But, thanks to the improvement brought about by the Control Society, the number of cattle kept had concurrently gone up (including growing beasts) by about 10 per cent. The average yield per cow in Ireland is about 450 gallons.

Now here is conclusive proof of the value of improved breeding. Nobody who had such figures brought under his notice could possibly remain insensible to their meaning.

And that it is which has led to the organisation of breeding on co-operative lines, under which submission to the rules established by experience becomes a necessity.

Even more than this, however, has been achieved.

It is the merit of Herr von Wattenwiel, of Elfenau, near Berne, to have first deduced the practical lesson from the logic here brought under notice. His creative instinct was stimulated by the fact that, under pressure of competition, cowkeeping had ceased, even in Switzerland, to yield a fully remunerative return. Even of the whilom noted Gruyère cheese only the very best known brands would fully repay the making. The price of milk had become subject to violent fluctuations and was likewise giving way. There were powerful combinations of middlemen and consumers in the field, pressing it down. However there was one kind of animal production which maintained a high standard of remunerativeness, and that was rearing animals for breeding purposes. Herr von Wattenwiel was accordingly not content with devising means for the improvement of the breed of milch-cows in the possession of farmers. He would enable the small farmer to enter the lists as a breeder, like the large, in order to obtain remunerative prices for pedigree beasts. His object was to "democratise" breeding.

For such enterprise conditions in Switzerland appeared generally favourable. For the Swiss are born herdsman. And Swiss cattle are popular on the whole Continent and, beyond that, in the new world. Their most redoubtable competitors abroad are the heavy black-and-white beasts reared in Holland, Oldenburg and the adjoining marshy districts, suited for lowlying country. The Swiss breeds are distinctively mountain breeds. They are three in number: the heavy brown Schwyz breed, the lighter red-and-white Simmenthal, and the black-and-white Fribourg, which is considered to be a replica of the Simmenthal.

with a changed coat. Of the three the Berne, or Simmenthal breed, commands the widest market. This breed has become in a way one of the parents of all the valued hill breeds of Germany. However even pure-bred Swiss cattle will not long retain their valued characteristics away from their own mountains, where, during the summer months, when up on their *Alp*, they benefit richly by the crisp, fragrant herbage, the invigorating air and the free movement allowed. Accordingly there is a constant demand for new, genuinely Swiss blood for infusion in the acclimatised breeds all over the globe. Hence the Swiss enjoy the valuable advantage of an extensive, never failing market, which makes good prices.

Bent upon utilising this circumstance, Herr von Wattenwiel began operations in 1888. He soon got a sufficient number of cowkeepers in his parish together to act; but he could not even attempt to persuade them, poorish people that they were, to discard at once their haphazard bred cows and invest in pedigree beasts. The sacrifice called for would have been too great. He must accordingly be content to begin with buying a good pure bred bull, and taking care that from the moment of the formation of what was to become a very composite pedigree herd not a drop of doubtful blood should be permitted to intrude.

Herr von Wattenwiel's first Live Stock Improvement Association was formed, like all that have followed, with a capital subscribed in shares, which as a rule range from 20 to 50 francs, issued in what number either a member's own choice or else the Rules might determine, and often enough proportioned to the number of cows brought to the "herd"—which is not the same thing as cows owned by the members collectively, inasmuch as after the first formation the society would admit only pedigree beasts to the "herd." The cows to be admitted must first pass

muster before a tribunal of experts. A man might accordingly have more cows in his yard than were recognised as members of the "herd" and admitted to contact with the "herd's" bull. The total number of cows admitted to the "herd" must naturally be regulated by what the bull or bulls could serve. As a rule it stands at about eighty, but in some cases it also rises to 100. Should there be too few "herd" cows to employ the full powers of the bull, then the bull might be allowed, by way of exception, to serve others. But there would be no entry of this in the herdbook. And the "herd's" cows must always have the preference. On their shares members became entitled to a moderate dividend; but their main benefit was to be sought in having a good bull at their service, and in being placed in a favourable position for disposing of the cows' offspring, being herdbook beasts. The money required for starting a society of this kind Herr von Wattenwiel puts at about £64, being about the value of a good bull. To secure an income, every member is called upon to pledge himself to bring a determined number of cows to the bull every year. The serving fee as a rule stands at only 2 francs, but there are cases in which as much as 5 francs is charged.

To examine the cows to be received into the "herd" there is a committee of three experts, upon the competence of whom of course the entire success of the association may be said to depend. The bull is likewise selected with particular care, being, as a rule, bought young. It is a very common practice to have two bulls, one full grown and doing the main work, the other growing up and put to work gradually and sparingly. The bull remains throughout the collective property of the association, and is sold for the association's account whenever it grows too heavy, which as a rule happens when it is about five years old, although animals are sometimes used at a more

advanced age. This is the best practice. In some Belgian syndicates, on the other hand, the bull is debited to the man appointed as its keeper at its estimated selling value to the butcher, and so credited once more when it comes to be sold, for the keeper's account, who is allowed to pocket any gain that he may make by skilful bargaining. The drawbacks attaching to this method do not require to be pointed out.

The keeping of the bull and all necessary attendance are invariably committed to one member of the association selected for his peculiar fitness for the task. He is allowed a certain payment for service and keep, settled by agreement, and is carefully supervised by a special committee, who stand on no etiquette. In many cases this man receives the serving fees as his own reward; in others, he is made to account for them and paid his remuneration by fixed salary. The lastnamed seems the better practice. The Committee see to it that the animal is properly housed, groomed, exercised, or else grazed, and fed on a dietary prescribed beforehand. A general rule laid down is that it should at all time be in a condition to be sold for slaughtering to the butcher. The Committee also check the bull's employment. In fact, every particular is scrupulously supervised; for the members of the association well know that if all things are not well done, their combination will be all to no purpose.

The keeping of "herd" cows is likewise made a subject of regular inspection by the same committee. In consideration of the benefits to be obtained through the association in the better sale of beasts, members are expected, and are quite content, to have their liberty encroached upon and in the matter to be placed under tutelage.

There is a register for the society, of course; but societies have long since combined to more or less powerful

federations, grouped according to the breed kept (Simmenthal, Schwyz or Fribourg), and such federations inspect on a larger scale and have their common herdbook—which common herdbook, being valuable for sales, constitutes perhaps the most potent inducement to members to join. In such herdbook, apart from the genealogical data, every particular attaching to each animal is noted, whether it be favourable or the reverse. Of course the yield of each cow is put down from year to year; and it is the yield of the dam mainly which determines the selling price of the offspring, whether bull or heifer.

Both the Federations and the Associations hold independent annual shows, at which all beasts belonging to the particular “herd” are exhibited and judged minutely by selected experts on the particular breed, invited from other districts. A distinctive feature is there made of “family” exhibits—the offspring, more particularly of bulls, being shown side by side with their sire, so that people may be able to judge of the permanency of distinctive features. Such shows serve the purpose of a useful advertisement—for they are freely visited by persons interested in the breed. And they are also greatly valued as permitting a comparison showing how the “herd” has improved, or else deteriorated, or changed in particular features.

By such means the difficulties of breeding pedigree beasts in small herds have been successfully surmounted, and small farmers have been enabled to enter the lists against large breeders and sell their young beasts at breeding prices. A young bull, which used to sell for 1,000 francs, now fetches 5,000; and a calf that was considered well got rid of at 40 francs now goes for 100, 150, and even 200 francs. There are large numbers sold, in the main at annual markets held severally by the five Federations, comprising among them about 600 associa-

tions, with about 12,000 members—which numbers in themselves afford evidence of the popularity of the system.

In respect of improving the quality of milch-cows, Herr von Wattenwiel's associations have accomplished a great deal. Figures indicating the increased yield of milk have already been quoted. Along with a larger yield, the quality of milk has likewise been improved, and 4 per cent. of butterfat is now a common proportion. In addition to this, the yielding life of cows has been lengthened. Cows ordinarily yield best between their third and fifth calves. But they now go on yielding in remunerative quantities up to their twelfth, and sometimes even their fifteenth year. As for the number of beasts sold, the two largest of the five Federations mentioned dispose of 900 to 1,000 beasts each annually at their great sales, including both young bulls and heifers.

While appreciably improving the animal material for both milk-selling and butter or cheesemaking, this perfected breeding has at the same time sensibly relieved the glut of animals employed in such industries, so that Agriculture has gained by it in two ways.

An institution so useful and so strongly recommended by its results could scarcely fail to tempt to imitation in other lands. Indeed, paternal Governments, observing what it had accomplished, left cowkeepers little time to bethink themselves upon the matter. German Governments, more particularly South German, early gave what encouragement they could. They detected the advantages, not only of studying the improvement of cattle, but also of employing the co-operative method for doing so, in order to enlist the interest and also the judgment and knowledge of those upon whom the main work must fall. The Swiss Government, or rather Governments—for it was the cantons which took the initiative—had opened the public purse-strings pretty wide in support

of this new lift to national Agriculture. By a standing rule the Federation for such purposes doubles whatever the Cantons give out of their own funds. The catalogue of grants and favours accorded would be a little long to enumerate here. But then the Swiss Governments contented themselves with giving the money, and left the management of the associations in members' own hands. Other Governments did not possess the courage to act with the same moderation. The Governments of Germany and Austria expend a great deal of money in support of breeding, but they also interfere not a little with its conduct, which is a mistake. And that is one reason why outside Switzerland the one object attained, and indeed only aimed at—a very useful one in itself—is the general improvement of herds, not the improvement of the market for breeders. Obviously, when compulsion is laid upon parishes as such to provide bulls and boars at parish expense for parish use, there can be little inducement for co-operation, nor can the best possible results be looked for. People do not under such circumstances take care to procure the best bull or the best boar. Nor are things likely to be so attentively watched and checked. The grants of £20 and £25 made freely for first outlay, recoverable by easy instalments, in not a few cases altogether free of interest, tempt to formal compliance, lest the money should go a-begging; but the soul of the Swiss institution is wanting. German Governments try to ensure success by reserving to themselves, in return for the grant, the right to select the breed to be kept, and also a general supervision; but this does not always achieve the desired object. It does not necessarily make willing agents of the persons subjected to such authority, nor lead them to employ their own best judgment—which is in any case the safest guide. The matter is scarcely mended where, in the place of the Government, Chambers of Agriculture—

which are in Germany bodies of very much larger functions and prerogatives than our own—Agricultural Societies and similar institutions take upon themselves the task of directing and subsidising, in what must be admitted to be a public-spirited way—even though in the matter of finance, things are undoubtedly made easy for the people led. Serving fees are mostly kept very low, at two marks or even one mark a service. The authorities providing the first outlay for the bull often leads to the question of the practice of the keeper being allowed to pocket the fees. In Belgium likewise, where syndicates, being supported by the authorities, are in the habit of fixing serving fees very low, often at as little as one franc—which may also be paid as an annual subscription, including service by the bull—and in some instances at nothing at all, keepers are often allowed to pocket what fees there are, or else to recoup themselves for their trouble and outlay by grazing their small flock of sheep on members' stubbles and uncultivated lands or fallows. It needs not be pointed out that this is very false economy, under the effects of which the bulls, which ought to be well kept, frequently suffer. Some German Governments have issued very stringent regulations against such abuse. Those issued by the Government of Bavaria go into the minutest particulars, directing in detail how the bull is to be fed, that its fodder is to include corn, not to consist of "soft" fodder only. The rules in force in Westphalia go so far as to direct that no cow (or sow, as the case may be) is to be served except upon production of a special permit from the Committee. The Bavarian rules insist that the keeping of the bull must not be given by tender to the lowest bidder, but entrusted to a person chosen for his particular qualification. The German Governments also in many cases claim the supervision of the keeping of the herdbook.

In Belgium likewise Government assistance as a stimulating adjunct is distinctly in evidence. The State

a few years ago paid £800 a year towards the improvement of cattle breeding; the "National Society," formed in 1890, contributed £4,000 more; and the several provincial Governments among them £16,000. In all probability those grants have been increased since. Belgian breeders have been wise in federating their societies to a few large unions. There are some 400 cattle breeding societies in existence, which, after an attempt to improve the local breeds by crossing with English sires, have generally adopted the policy of improving the native breed out of its own self. Complaints are, however, occasionally heard of the "National Society" favouring in its prize-giving form rather than yield of milk. In horse breeding the Belgians have, under the auspices of the active and resourceful *Boerenbond*, adopted the Danish system, which appears to answer in Limbourg and Brabant. There are also about 350 societies for improving the breed of goats, with about 35,000 members and about 40,000 goats—which figures sufficiently indicate that the societies are composed of very small folk. The existence of some twenty-five societies for improving the breed of rabbits—in West Flanders—provides a distinct Belgian speciality and promises benefit to ourselves. For we are the great consumers of Belgian rabbits. In 1908 no fewer than 25,000 cases, holding 120 rabbits each—that is, three millions in all—were shipped from Belgium to London.

Denmark, as we know, was one of the first countries to borrow the excellent institution of "Control Societies" from Switzerland and put it to good use. As in Switzerland, Live Stock Improvement Societies in Denmark enjoy pecuniary assistance from their Government, which contributes on an average about 150 crowns (about £8) per bull, as practically a pure gift. There is no condition attached to it, except that the bull employed should be at least twenty-one months old when first put to service,

and have taken a prize at some show. In 1909 Denmark numbered 1,260 Live Stock Improvement Associations for cattle—1,885 Live Stock Improvement Associations in all—with 31,300 members and 1,464 bulls employed, subsidised as has been stated.

The Netherlands Government bestows greater care upon the selection of bulls. It makes grants varying between 40 and 100 guilders in each case in aid of the judging of bulls, which has to proceed through two stages. In the first place there is an examination in one of the 115 places selected for the holding of local shows, and afterwards in one of the nineteen places where larger exhibitions take place. Associations complying with the Government regulations in respect of the choice of bulls are allowed annual grants ranging from 50 to 100 guilders.

There is no need to extend the survey. There are similar associations in more or less all continental countries, generally assisted by the Government. Italy, among others, does a great deal for the improvement of its very inferior herds by crossing with Swiss bulls, and also by purchase of Swiss cows—both Simmenthal and Schwyz—by co-operative action. However, even the method adopted is more or less everywhere the same, the favourite form being the keeping of improved bulls (or boars) in common, recouping the outlay out of serving fees. There can be no question that such procedure has done good in improving breeds and increasing their value. But it is all more or less—barring the Government grants—on the lines of our own bull and boar societies, and does not rise to the height of what is done in Switzerland and Denmark. The “Co-operative Breeding Societies” of the United States are of the same type. Their members co-operate for the keeping of a good bull of some particular breed which they endeavour to identify with the locality.

One noteworthy result of foreign—and more specifically Swiss—co-operative cattle breeding has been, so

it may be interesting to note, the better regulation, and in some cases the rehabilitation, of pasturage and more particularly of mountain grazing. In Switzerland *alpage* (*alpeggio*) is considered an absolutely indispensable feature in cattle rearing. The prime inducement to it was of course the existence of common lands (*Allmend*) on the Alps, to the use of which parishioners had a right in their several localities. However, since Live Stock Improvement Associations have been formed, it has become usual for such, in compliance with Herr von Wattenwiel's urgent recommendation, either to purchase, or else, at any rate, to rent, Alpine pastures of their own. For without a bite of Alpine herbage, and a whiff of Alpine air in their young days, and a tread upon their free mountain turf, Swiss breeds are found to deteriorate. Some of the arrangements made for common use are primitive indeed. Members just use the pasture in common, doing the herding in turns, without troubling to inquire what precise share in it each one is entitled to. In other arrangements arithmetical ingenuity has been impressed into service to elaborate a fully equitable distribution of both expense and benefit. Under such arrangements as a rule paid herdsmen are employed, and in some cases the individual owners of cows are even forbidden to interfere at all with their own beasts while on *alpage*. The keep is paid for by its owner at so much a beast, or else per beast and age—a certain figure for a calf up to one year, more in proportion for older animals.

The admirable effects of such mountain pasturing upon growing cattle have caused grazing as an essential feature in rearing to be adopted long since North of the Alps—not merely in distinctly mountainous country such as the Black Forest and the Bavarian and Bohemian Highlands (where of course it is of older date), and recently also in Silesia (where the Giant Mountains provide what

has been found a useful substitute for the Alps) ; but also in less rugged country, where hitherto stall feeding has been the rule, and a gambol in the yard was the utmost in the way of exercise that a young beast could ever aspire to—for instance, in Saxony. Everywhere now a point is made of open pasturing. There are common pastures of all sizes, from 40 and 50 acres up to 40,000. In Bavaria it is very common to charge a fixed amount per beast, say, from 20 to 30 marks for a season of 110 to 120 days. In one case growing cattle are charged for at the rate of 15 marks per head, if under one year, and 20 marks beyond. In another case there are three gradations, charged for severally at the rate of 15, 20 and 25 marks. In some instances the grazing money is calculated per live weight, an animal up to 200 kilogrammes (about 400lbs.) paying 32 marks, up to 300 kilogrammes 36 marks, up to 400 kilogrammes 42 marks, beyond 400 kilogrammes 48 marks, and specifically bulls up to 250 kilogrammes 70 marks, and beyond that weight 80 marks. Thus it is in Württemberg, and it should be noted that the lastnamed higher charges expressly include a daily feed of corn. There are some charges higher still to be met with in Württemberg, and likewise in Baden. The Governments of both countries contribute generously towards the upkeep of the pastures. In not a few cases beasts turned out in this way to common grazing are first made to undergo medical examination by a veterinary surgeon and even to be inoculated for tuberculosis. A few years ago the number of pasturing societies stood in Germany at 85. It keeps steadily increasing.

I am aware of only one society devoting itself to collective mountain pasturing in these isles, and that is one in the Scotch Highlands, embracing seven counties, which include the Orkneys and Shetlands. It does not, however—according to an account recently made public

—appear to give entire satisfaction. The stock grazed is said to be the property of well-to-do crofters.

To return to breeding and rearing proper, it need scarcely be pointed out that the same co-operative method of raising live stock may well be applied to other types of animals besides neat stock. But it is to be questioned if in our country quite the same interest will attach to what has been done abroad in this way with respect to horses, pigs, goats, and even rabbits.

Goat breeding is paid attention to in more countries than one, and such attention appears well deserved. For where there is insufficient keep for a cow, a goat, or two or three goats, with their moderate requirements—coupled indeed with a curious taste for variety, such as happily the public roadside will generally supply—make of them a valuable substitute. Their milk, rich in solids, and particularly rich in nitrogenous constituents (and therefore specially valuable for children) and their manageableness should serve as noteworthy recommendations. And there appears to be especial call in their case for Co-operation. For, docile and meek and clean as the nanny is—there is no foundation whatever for the charge of “smell”—nobody who can help it would care to burden himself singlehanded with the keeping of a refractory, dirty and distinctly malodorous billy. Breeding of course improves the yield of milk in a goat as it does in a cow.

In Germany, goat breeding, as providing useful live stock for very small holdings, or else for small holdings generally not very productive, on heath and forest land, has come very much to the front. In the province of Hanover alone there are now about 250 goat breeding societies—in the place of only 15 fifteen years ago. Their declared object is to breed goats of good build, yielding ample milk, and hardy enough to thrive in a rough climate.

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Two of these societies occupy "goat farms" of their own. That at Schüttorf, comprising twelve acres, has attained a certain degree of celebrity. Both billies and nannies there kept are of improved breed. The billies are of course available for breeding outside the flock of the farm. The covering fee used to be sixpence, but now stands at a shilling. Members appear generally satisfied with the results obtained.

In France the value of goat's milk consumed in the year is estimated at 24,000,000 francs, as compared with the 1,225,000,000 francs' worth of cows' milk and 3,000,000 francs worth of ewes'.

Goat breeding is also fairly common in Sweden and gives satisfaction. In the northern provinces alone there are now stated to be about 66,000 goats.

One may be thankful to see, also in this country, the goat being paid greater attention to. Nevertheless, it may be in point to recall to mind the old German peasants' saw, which says :

"Sommerkorn und Ziegenmist
Lässt den Bauer wie er ist,"

which means : the habitual use of spring wheat or rye and of goats' dung leaves the peasant no better off than he was before. A goat can, after all, count only as a *pis-aller*.

It may be of greater interest to note that the co-operative method has rendered exceedingly good service on the Continent in respect of horse breeding. In some cases, as for instance in Denmark and in France, it has been turned to the same account as for cattle breeding in Switzerland, namely to standardize particular breeds and secure a better and stable market for them, thus putting more money into breeders' pockets. In some cases Co-operation has succeeded in inducing people to improve their breeding where previously even very active

Government admonition and promises had failed. Thus it has been in Switzerland, where Government measures aimed at the production of useful cavalry mounts—for which purpose horses are examined on farms by cavalry officers travelling from village to village—proved fruitless; but Co-operation, introduced in 1894, has scored a distinct success. There are now no fewer than 53 co-operative horse breeding associations in Switzerland, of which 31 breed draught horses and 22 saddle horses.

There is not a little co-operative horse breeding also in France, and such breeding has been found useful in standardizing breeds and thereby securing to them, by reason of their uniformity, a dependable, improved market. This effect has been particularly noticed in respect of the grey Boulonnais breed, which is—though by reason of its coat not liked in some foreign countries, as for instance in the United States—highly valued at home—so much so that it has been found necessary lately to extend the area governed by its studbook. The societies act at the same time as selling societies on behalf of their members, and in that capacity transact a considerable business.

At Niort there is a syndicate for co-operatively rearing mules, and another for breeding donkeys.

Denmark possessed in 1909—the last year for which I have figures—no fewer than 270 horse breeding societies, employing collectively 312 stallions. These societies are subsidised by the Government to the extent of 159,000 crowns (about £10,000) in the shape of grants up to the value of one-tenth of the cost of keep of each stallion, up to five years altogether, after which period its utility is supposed to be gone. The maximum grant in respect of one stallion is however limited to 4,000 crowns. And the entire subsidy is made conditional upon the stallion being well kept and in good health. In addition the Government gives a number of prizes at annual horse shows.

Co-operative pig breeding societies are plentiful; however their action is as a rule restricted to the common purchase and employment of good boars. In Denmark, conspicuous pig fattener that it is, there were in 1909 no fewer than 253 co-operative pig rearing societies, employing among them 328 boars, and subventioned by the Government to the extent of 16,000 crowns—generally speaking, 50 crowns per approved boar, which must be either of Danish or else of the large Yorkshire breed.

There are also co-operative sheep breeding societies, at any rate in Switzerland and in Denmark. Neither of these countries is a genuinely sheep breeding or sheep keeping country. But small flocks of sheep are employed to graze off stubbles. In Denmark co-operative tup raising and tup keeping is encouraged by the Government by grants given at the rate of 50 crowns a tup. There were in 1909 102 such societies in existence, employing 109 tups, almost every one of them of some English breed.

In all these societies the methods employed are cast altogether on the same lines as in the cattle improvement societies. The secret of the success obtained is the regulation of the size of the society according to the powers of the male animal or animals employed, and, beyond that, the employment of sound experts, more particularly on the examining committee, and of a trustworthy keeper of the male animal, coupled with strict supervision and an interest awakened among members in selecting the best animals for continuing the breed, which is to be accomplished by making them understand the gain which that must bring to themselves. There is no resisting the argument addressed to the pocket.

Against all this we have in this country for the present only little to set, although there are some beginnings. For our breeds—in which form and meat making are as a rule most studied—provide, after all, rather luxuries

for the rich than useful beasts for the small man. There is many a small cottier who does not profit by them. We have, however, attached to the Agricultural Organisation Society, several local associations which make it their business to improve some local type of live stock, but only by the provision of sires. Thus we have the Leicester and Rutland Cattle Improvement Society, the Lledrod Agricultural Society in Cardiganshire, likewise, for cattle, the Tiverton Farmers' and Shire Horse Society, the Tregaron Society (for the improvement of the breed of pigs), the Vicar's Farm Society in Worcestershire, for the improvement of the breed of poultry. However, one cannot help thinking that in some districts in the United Kingdom there must be room for Co-operation of the kind here spoken of, or let us say, for more systematic Co-operation than there is already. We want to rise above mere bull and boar societies. With our famous breeds of all kinds of animals, recognised all over the world, and sought after all the world over, one does not see why we should not have breeding societies like those of Herr von Wattenwiel, and why, at any rate in the case of neat stock, we should not develop the milking qualities of our cows, as has been done abroad, by careful selection, and by sifting and choosing, till we arrive at the attainable maximum.

XI.—CO-OPERATIVE INSURANCE.

Insurance—which among smaller farmers in this country, is not yet nearly as much practised as in the interest of their own safety is to be desired—from its very nature lends itself remarkably well to co-operative methods, provided that the safeguards which common business prudence dictates, are properly observed. In very truth Insurance was co-operative before it became commercial or speculative. The first hail insurance societies were co-operative, or mutual; and so were the first live stock insurance societies. And over a large portion of the Continent rural fire insurance has grown up as “mutual” business—though as a rule under Government compulsion and Government supervision. The Prussian *Feuersozietäten*, which date originally from shortly after the Thirty Years’ War, may be said to apply the co-operative principle of *Landschaften* to insurance. They bind the landed proprietors of a district in common liability, out of which to compensate any one of them who may suffer damage by fire. These three forms of insurance deal with risks against which Nature itself seems to suggest that there should be protection by provident action, and accordingly in respect of one of the three, at any rate, namely fire which as early as in the days of Virgil was discovered to affect the interests of neighbours, and therefore conceivably also the interests of the entire local community—Governments may be held to have been in the right in interfering, as they have done in Germany, not only making insurance compulsory, but even going the length

of prescribing the very co-operative method which—at a time when Insurance Companies were not yet thought of—provided the only actual safeguard available.

Since then Insurance has become pretty general. And self-interest has prompted people to take advantage freely of the ample opportunities furnished to them, in the main by speculative Joint Stock Companies, of insuring against a great variety of risks—at a fixed charge, which condition is found a decided convenience. However such convenience has to be purchased at a price—the price of the absorption of what at first glance appears a monstrously disproportionate portion of the premiums paid, in managing expenses. And subsequent wranglings over the amount of damage to be compensated are not altogether unknown, nor are they unaccountable under an arrangement which places two antagonistic interests into juxtaposition—that of the insurer, whose object naturally is to secure the highest possible amount of profit, out of the insured, and that of the insured, who as naturally endeavours to obtain the most valuable quidproquo that he can for his premium.

All these things considered, it is not surprising that agriculturists should have turned their thoughts to the subject of co-operative insurance as a matter of economy, and that Governments—having, for one reason or another, agriculturists' interests at heart—should have supported their aspirations by measures which were doubtless intended to be helpful, but which in some instances, so it must be objected, have been carried a little too far.

A case well illustrating such evolution from accountable dissatisfaction to success secured by independent action is that of Hungary. It is not the only one that might be quoted. The Hungarians never thought of co-operative insurance till in 1897 and 1898 the insurance companies, complaining of unsatisfactory results, suddenly raised

the premiums charged for hail insurance by 100 per cent. Resenting this—which they considered an imposition—the Hungarian farmers, who had been well taught co-operative methods in many things by the late Count Alexander Károlyi (as they have been since by his successor in office Count Mailath), at once proposed to turn self insurers. The Government, always ready to help agriculturists with taxpayers' money, promised 400,000 crowns towards the venture, provided that at least 1,000,000 crowns was subscribed otherwise. And since as much as 1,300,000 crowns was in this way raised in little time, the new society began operations with 1,700,000 crowns share capital, which capital has been since increased to 1,981,360 crowns. The value insured by the society thus amply provided with funds in 1910 amounted to 757,985,407 crowns fire risks, 54,095,929 crowns hail risks, and 9,796,000 crowns life risks, and its annual receipts in premiums now figure at close upon 5,000,000 crowns.

The factors which Co-operation can bring to the accomplishment of the task which it sets itself in dealing with Insurance are two.

The first such factor is that of numbers. A hundred thousand persons offering to be insured can obtain considerably better terms for each of them than one coming by himself. Where there are large numbers to act in concert, these may either proceed, as the Hungarian agriculturists just spoken of have done, and as our industrial co-operators are doing in their excellent "Co-operative Insurance Society," that is, organise their own co-operative—or what must be pronounced to be rather a "mutualist"—society; or else they may make collective terms with some powerful capitalist insurance company which, in consideration of their numbers, may be counted upon to quote them lower premiums than to the general public. The last-

named is the plan upon which the great agricultural co-operative unions of Germany and of some other continental countries have elected to proceed. And this plan has, in Germany, been carried so far that powerful unions are allowed to enter into agreements with several Insurance Companies at the same time, thus giving their members the option of insuring with one or the other, as they may prefer, and have also had terms conceded for entire parishes, being once more lower than those for individuals. The enormous force of numbers at the back of a great union enables it to obtain in this matter the very best terms attainable and, in a fluctuating market, at all times to place members at the most advantageous point conceded at all to the public. This method has its great merits. It avoids the trouble of organisation and safely eludes the difficulty of which unfortunately a good many among ourselves, in this country, will not take sufficient account, but which is a most important consideration—namely, the difficulty of providing an ample capital of guarantee to meet all claims that may arise. The co-operative principle resorted to under this particular method may be looked upon as generically of a piece with that which Co-operation presents when acting for distribution. The mischief is that its advantages do not yet present themselves in their most alluring shape to ourselves in the United Kingdom, inasmuch as we have not yet, in Agricultural Co-operation, the “big battalions” of foreign agricultural unions to bring to the engagement.

The other factor which Co-operation can bring to bear upon the problem—applying rather the co-operative principle generally associated with co-operative production—is that of localised control: getting rid of the middleman, doing one's own administration gratuitously or very cheaply by minute “dividing down,” watching the insured, and checking the valuation, all of this with

intimate local knowledge. The effect of all this, supposing that it is properly carried out, is, in the first place, a considerable economy in expenditure, both of management and of compensation, and a serious diminution of risks, because the objects insured are perpetually under the eyes of those who know all about them and who are directly interested in the avoidance of damage. To quote one instance, from home, illustrating this, our Co-operative Cow Insurance Societies manage to insure—as is shown in the *Journal of the Board of Agriculture* for May, 1912—a cow for 5s. or 6s. a year (producing a good balance sheet), for which Joint Stock Insurance Companies would charge—and have to charge—15s. The principal reason accounting for this is that in Insurance Companies the loss to be made good averages 6 per cent., whereas in Co-operative Societies it averages only a little over 2 per cent.

Agriculturists may take their choice of either of the two methods shown to be placed before them, according to the peculiar circumstances of their own case. Our friends in Ireland have thus far decided in favour of the second, alike for fire and for working men's insurance, contracting with a company, in the case of working men's insurance with the Co-operative Insurance Society—like the Germans, who have carried economy in the matter very far, though without displacing some thousands of small local societies of co-operative self-insurers of live stock. Also in Scandinavia this method is common. And the Belgian *Boerenbond* has a standing arrangement with our Norwich Union. The method is useful for fire insurance, and more particularly to be recommended for insurance against hail (the risks of which are very considerable) and for life insurance (which requires large capitals), not to speak of fidelity, burglary, glass and the other minor forms of insurance, which are better dealt with by a company—although

it deserves to be mentioned that our (industrial) Co-operative Insurance Society at Manchester has found fidelity insurance under its own peculiar circumstances highly profitable, to the extent of covering, during the first fourteen years of its existence—before the safeguard now practised in fire insurance came to be adopted—the losses then occurring in fire insurance. The main requisite for insurance by contract is numbers.

The first named method, that adopted by the Hungarians and our industrial co-operators, has been applied to hail and life, as well as to fire and live stock, for both of which latter it is, under appropriate circumstances, exceedingly well suited. Its main requisite condition is organisation, though it cannot do without capital, and it ought to take care not to extend its liabilities beyond what it can answer for, so that it will require to supplement its own direct local action by federation or reinsurance. This method has abroad achieved some genuine successes. But it is, as has been already stated, rather "mutual" than fully "co-operative," inasmuch as there is centralised management, in which the bulk of the members take no part. It presupposes numbers as well as good organisation and very judicious handling of the risks insured, lest the means at its disposal should prove inadequate. The form of insurance to which this method was first applied, is that of insurance of live stock. In the course of time it has in its development been carried very much farther—but what actually first prompted it was the risk to which the small owner of one or a few cows or pigs found himself exposed. That cow or that pig was his main breadwinner. It stood to him for a substantial capital. But it was at the mercy of any untoward accident. In the large farmer's herd or flock the risk became equalised and reduced to an average, but to the small man it represented a serious danger.

In this form of insurance the Danes claim, since a long time back, to have been the first in the field, centuries ago. Our own first registered society, that of Ormskirk in Lancashire, dates from 1807. The small peasantry of pretty well every country have—like our own small folk combining to their cow and pig clubs—sought to secure themselves against unlooked for mortality by joining together and engaging to share in common the cost of any particular member's loss of a beast, each man contributing his own share, of which the immediate loser's is as a rule the heaviest, averaging from twenty to twenty-five per cent.—in our country as a rule twenty-five per cent., since the Club refunds 15 shillings in the £—but in some cases abroad up to fifty per cent. In this country only some of the pig clubs allow the full value of the animal. The governing idea is a thoroughly co-operative one, although at first only rudimentarily carried out; upon a loss occurring a levy is made, each member contributing equally—as a rule per animal insured—so as not fully to repair, but only to mitigate the loss to the victim, who is thus left with quite enough reason to avoid such losses as well as he can.

Generally speaking it appears preferable that insurance should be confined to one species only of animals; but obviously there will be cases in which provision may be made for more than one.

We ourselves have one "horse and cow club" and two "horse clubs" pure and simple. One of our horse clubs, that of Newark, registered since 1898 as a Joint Stock Company—which form of registration secures to it the privilege of paying income tax upon its annual overplus—has been rendering useful service since 1840. It insures horses according to their estimated market value, at graduated rates—2s. 2d. a quarter for a horse valued at £7 10s.; 5s. 9d. for one valued at £20; 17s. 6d. for one

up to £60 ; and special rates for more expensive animals ; giving in return free veterinary attendance and medicine within a radius of eight miles, and two thirds of the value in the event of death. And members appear satisfied with it.

Abroad, co-operative or mutual insurance of horses is very common. Denmark, which is also to the fore in co-operative horse breeding, has about 1,400 small mutual associations (parish societies) for such purpose, in which losses are shared by all members, each contributing *pro rata* of his own insurance. Holland has about 400 co-operative horse insurance societies, insuring among them about 60,000 horses. Belgium has about 200 societies and 40,000 animals. In Switzerland, where cantonal Governments and the Federation help liberally to provide for the insurance of neat stock—contributing in 1906 £24,510 out of the £78,712 paid in compensation—the co-operative method is by preference applied to horses. Horse insurance societies are in that country numerous and financially strong. Their method of insurance has some special features. Compensation is in some of the societies carried up to as much as 95 per cent. of the value, which is preferably declared at its full. Experience has shown that it is not among high-priced horses that greatest mortality occurs but, on the contrary, among animals of small value—the high-priced ones presumably being more carefully looked after. Hence the policy first pursued by the Government of discouraging high declarations has been advisedly abandoned. Premiums run a little higher in proportion for horses than for cattle. In Belgium—where the law makes it obligatory that horses and donkeys shall be insured, as well as cows—Co-operation ministers to the insurance of the lower form of full-hoofed animals. The co-operative insurance of beasts in Germany by the same means has already been referred to.

Abroad, likewise, insurance of goats is very general. The goat is there prized as a valuable animal. Belgium numbers about 400 goat insurance societies, insuring goats at the rate of 5d. for 8s. to 12s. value of the animal, sheep being insured in the same proportion, that is, at 10d. for 16s. to 24s. value. Holland numbers 50 to 60 goat societies, which also insure sheep, with about 3,000 members and 6,000 animals insured.

Many of the clubs spoken of are still maintained in their primitive simplicity, more particularly among ourselves and in Denmark. In our own—as in a country in which people trust not a little to fairness and common sense among themselves—the rules are generally speaking very simple, but are found sufficient. Abroad a great many limitations and regulations have been introduced, to insure that the working shall be equitable.

The first consideration presenting itself in such cases is that of size and area.

The object of the organisation is to make management cheap and simple, and the insurance practised subject to easy control. Abroad, more particularly, people are anxious that the insured animals should be always under the society's eye. Accordingly, although undoubtedly there is an advantage in numbers, the area is, as a rule, made compact and readily manageable, and the number of beasts insured is kept down. Only in the Scandinavian kingdoms, where the Governments supervise the insurance, —which interference in every case tends towards the same regrettable result of lessening the sense of responsibility—society districts are sometimes large, extending over a whole province, even the whole kingdom, and the herds insured number by hundreds and even thousands. One or two such very comprehensive organisations will be specially called attention to. The Norwegian Government, which greatly interests itself in mutual live stock insurance

disadvise the formation of independent societies where there are not at least 50 to 100 horses or 200 to 300 cows to be insured. It was the Governments of those countries which encouraged society formation—rather “mutual” than *bona fide* “co-operative”—on a *large* scale, as more fully equalizing conditions. However, more particularly in Norway, results have declared entirely in favour of the small local and genuinely co-operative societies, in which, on an average, losses have been smallest. In France, which is foremost in this kind of insurance, towards which the State does not stint its questionable assistance, societies average about 55 members, and cover in each case a commune only. So it is also in Belgium. And in our own cow and pig clubs—though we have one comprising close upon 300 members—the membership generally ranges between 20 and 70. This is not a fortuitous circumstance. Common sense has taught the insurers that under Co-operation of this type the district must be small, in order that management, being locally given gratuitously, may not enter largely into the account, and that control may be effective.

Admission is by election, which in our own case, coupled with very great strictness practised in respect of compliance with the rules laid down—on pain of forfeiture of benefits—is found a sufficient safeguard. There is a difference of opinion as to whether it is advisable to limit the number of one man's animals to be insured. Our own cow and pig clubs appear jealous of allowing a man to obtain an excessive claim, and accordingly limit the number of animals to be accepted for insurance from one man—although in such manner as to provide for practically all that a small man is likely to require, for instance, up to three or four pigs. But there are cases in which members have been permitted to insure up to six cows each. The general rule, however, is one or two. At the same time

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they also limit the insurance value of animals, lest the death of a particularly high priced animal should involve the society in too heavy a loss. Abroad many societies take a diametrically opposite course, stipulating that every member should insure every head of cattle or every pig that he possesses; and in Switzerland, more particularly, they advisedly charge the levy made per head, regardless of the value of the animal, *in order* that members may keep as highly bred animals as possible, since there is distinct economy in this, seeing that the £100 beast taxes their pocket no more than does the £10.

As a matter of course every animal entered for insurance is carefully examined—in this country by the “marker,” whose office it is to “mark” accepted animals by branding them on a horn or on the right forefoot (pigs on an ear), and who is selected for his post as being known as an experienced cow or pig keeper, so that his examination is as a rule found sufficient. No animal showing any signs of disease is accepted, nor are animals below or beyond a regulation age fixed. Should the marker see cause to doubt the health of any animal offered for insurance, he is bound to refer the matter to the “valuing committee,” which consists of three members selected for their fitness, two forming a quorum, and whose decision is final. There is a small fee payable for such examination and “marking.”

Insurance societies abroad do not, so to put it, pay any greater attention than ours to the avoidance of risks of casualties, but they evidence their anxiety by more searching watchfulness. They have very precise rules about the causes of death which entitle to compensation, drawing the limits very narrowly, and suggesting supplementary insurance for a variety of casualties. As a matter of course epidemics are excluded from liability falling upon societies, as being a matter rather for the

community to deal with on public grounds. Death by glanders, tuberculosis and similar diseases is generally excluded abroad; also death by miscarriage—or else liability for compensation is limited to the first or the first two miscarriages only. So is, in Germany, death in the course of conveyance from one place to another, or in taking to market, and also death due to the fault or the negligence of the owner of a beast or of his servant. A distinct kind of insurance—now also clamoured for in France—is in use in Germany for death by order of the meat inspector, provided that the animal condemned by him appeared *prima facie* sound before the examination. Death on *alpage*, or generally in the course of mountain pasturing, is likewise disallowed—and specifically in Belgium death by lightning or in the course of war or public disturbance. In Sardinia, on the other hand, where primitive conditions prevail, death by violence, or loss of animals by theft or by houghing, is allowed to establish a good claim to compensation.

A method of insurance—rather “mutual” than “co-operative”—very popular in Sweden and Denmark, similar also to what is practised in Hungary—may be held to merit special mention. The Swedish society frankly calls itself a “Company.” Responsibility in it attaches to each member. But the management is centralised. The Company insures over all the kingdom in four different ways—by simple insurance per animal, providing compensation for the full value insured; by “combined” insurance, for several animals at once; by “collective” insurance, *en masse*, i.e., of the entire number; and by insurance specifically against contagious diseases and loss of milk. There are a variety of special conditions. Bulls, cows and calves must be insured collectively; but bullocks may be carried to a separate account. The insurance value of horses is automatically raised up to the fourth

year and automatically reduced after ten for cart horses, and after twelve for others. Similarly the compensation value of cows is reduced by 15 per cent. every year after eight. There is no compensation for death caused by tuberculosis.

The conditions in Danish "mutual" insurance societies, of which there are a number, carrying on business all over the kingdom, are similar. One society, "Kustos," insures the whole stock on a farm in one lot. If only one animal should die during the year, its loss is compensated at only 40 per cent. of its value, but for the second and subsequent animals 80 per cent. is paid. Another society, "Pan," acts also as a reinsurance society. The "Kreaturforsikrings Forening" insures against everything except cattle plague, but charges 2 per cent. more, that is, 5 per cent. of the value, for inclusion of tuberculosis. Compensation is rather lower than in most other countries, namely, only two-thirds of the ascertained value. And mortality amounts on an average to about 3 per cent., which figure, although wholly on a par with our own, contrasts rather favourably with that recorded for some parts of Germany, which reaches nearly 3.50 per cent. There were in 1906 28,723 members, insuring among them 257,815 head of cattle.

Any casualty occurring, and coming within the limits of the insurance practised, has of course above all things to be proved. In our cow and pig clubs the owner of the animal is required to advise the secretary at once, who in his turn advises the valuing committee, which assesses the damages. In our clubs, provided that the owner of the animal accepts such valuation, the settled percentage of the value (as a rule 15s. in the £) becomes due to him at once; but the animal becomes the property of the club, to do with, as it may please. The valuation is based upon the assumed value of the animal before it

fell ill or had an accident. Death by contagious disease does not invalidate the insurance, but involves an obligation upon the victim of a casualty to disinfect at once his stable or shed and also the adjoining buildings, failing which his insurance lapses.

Abroad the course adopted is very similar. Animals are valued, supervised, paid for and taken over by the Society—often enough to be slaughtered for sale as meat, wherever circumstances permit, and the value realised is taken into account. Members must not kill their own animals, but leave that to the society. In some cases members of a society are required to take a certain quantity of meat of the slaughtered animal, proportioned to the number of beasts insured by themselves, off the society's hands at a fixed price, which purchase constitutes their contribution towards compensation. However, abroad, the whole matter is complicated by the assistance which Governments make a point of giving, in the supposed interest of the governed, coupled with interference and dictation, which is the price to be paid for such deceptive assistance. The motive for all such interference and assistance is impatience to see the benefits which co-operative—or "mutual," as it is really more correctly termed in France—insurance, extended over the whole of the agricultural population, which population is habitually slow to take advantage of opportunities opened to it.

It is this same motive which recently led our Board of Agriculture to offer pecuniary assistance to co-operative live stock insurance societies, though the healthy financial condition of what few registered cow, pig, or horse clubs we now possess—far too few in number, unfortunately—shows that, once people are made to understand the benefits offered by insurance, money is forthcoming in quite sufficient quantity. What, accordingly, is needed is not the schoolboy's lollypop to make him do his exercise,

but instruction to show how he is to master it. Abroad practically only the Government of the Netherlands fails to interfere with its live stock owners in the matter of insurance. In Belgium the Government opens its purse wide and supervises searchingly. But there is no compulsion except in West Flanders. Elsewhere the active propaganda carried on by the *Boerenbond* has led the authorities to desist from the proposed compulsory measures. However, the little societies—about a thousand in number, for cattle only, and very much in the rough in the way of organisation, and unregistered to boot—are understood to answer well.*

In Germany and Austria State interference is rampant. Special favours paid for by the taxpayer are conferred with fairly lavish hand, but in return the inspectors controlling are everywhere in evidence. Insurance is made obligatory. The Swiss Governments also assist, but without seriously interfering. They leave societies to manage their own affairs, and content themselves with laying down general rules, inspecting and paying subventions. Their benefactions are confined to cows and pigs. However, horse insurance societies do just as well without Government assistance.

*The following figures referring to the year 1906 are taken from the *Bulletin de l'Administration de l'Agriculture* :

	Number of Societies.	Number of Members.	Number of Animals Insured.	Average Value.			Number of Animals Lost in 1908.
				£	s.	d.	
Cattle	981	88,723	257,815	13	12	0	6,498
Farm Horses..	170	20,441	38,266	34	0	0	1,037
Stallions ..	4	541	714	136	0	0	18
Goats	232	23,232	35,184	0	17	0	2,358
Pigs	42	4,109	4,109	3	12	0	376

The figures for the following year show an advance in the number of societies from 1,431 to 1,622 in all, viz., 1,023 cattle insurance societies, 191 horse, 349 goat, and* 55 pig.

To return to the general consideration of the organisation of a co-operative insurance society, it remains to deal with the very important point of raising the requisite funds. There are three methods practicable and actually in use.

In the first place, funds may be raised by a levy covering the more or less varying actual expenditure incurred, *after* the event. This is sometimes extolled as "the most co-operative" of the three methods, inasmuch as it deals only with expenditure actually incurred and simply distributes the burden, making the member receiving compensation bear his own proper share. It however labours under this disadvantage, that under it there is no ready cash to pay out and that accordingly, since levies cannot as a rule be made at frequent intervals—although such practice actually prevails in some societies in Switzerland—the loser of the animal is likely to be kept a long time out of his money.

An expedient for meeting this difficulty has been devised in some countries by means of credit, the money required during the year being raised by loan. But this is not everywhere practicable and it adds to the expense. Hence the method is not generally in favour.

In the second place, a society may proceed for all things like an ordinary joint stock company, levying a fixed premium. That has its convenience; but it gives rise to this practical difficulty that under such scheme, the money accumulated for compensation may prove insufficient. The case has indeed not infrequently occurred of the compensation allowed having for this reason to be reduced below its normal and bargained-for point, even down to 10 per cent., instead of the 80 per cent. stipulated for. It is impossible for a co-operative society to calculate in advance a rate of premium likely to prove sufficient. Mortality, so it is true, has been ascertained

to figure in ordinary years generally at three per cent. But there are exceptional years; and even in ordinary years such figure does not apply to societies individually, but stands for the average for the whole country, and in single societies there are great fluctuations. A joint stock company in its own interest takes a little more than will be required and pockets the difference as gain. A co-operative society may not care to do this. Under this method—and to some extent under the one still to be discussed—a subsidiary question arises:—Should the subscription asked for be proportioned to the *number* of animals insured or to their *value*? The latter appears the more businesslike course. However in Switzerland—the example of which, herd-keeping country that it is, ought to count for something in this matter—the levy per head is frequently preferred on account of its simplicity. It does away with the necessity of valuation on entry of the animal and also simplifies accounts. And it is urged in addition, as has been already stated, that it presents an inducement for the improvement of the breed, inasmuch as insurance becomes practically cheaper the greater is the value of the animal insured.

On these grounds the third method—which appears to be most in favour with our own cow and pig clubs, to be met with mainly in Lincolnshire, but also in Derbyshire, Northumberland, and Cornwall—seems the most advisable, namely, that of levying a fixed subscription, to keep the society in cash, with liability attached to it to pay an additional levy after the event, should occasion require it. Under this system our cow and pig clubs—so far as there is a record of their business—thanks to their provident action find themselves quite sufficiently in funds to meet occurring calls. Indeed, they keep a fair amount of money over, which shows that they have fixed the regular subscription rather above the point

that may be held strictly needful. However, no one seems to grudge the money. And this is a complete answer to the urgings of those foreign administrators who insist that small owners of live stock are not to be prevailed upon to pay the full amount of the co-operative substitute for a premium, and that accordingly public bodies must come to their aid with money raised from taxpayers, who have no earthly concern with the small owner's cows and pigs.

The method of our cow, pig, and horse clubs—all of which are financially absolutely dependent upon themselves (except that in some cases honorary members supply the questionable help of dole-subscription)—are very simple. There are, unfortunately, not many figures available, because most of the societies appear to be unregistered.* The registered ones, so far as they survive, appear strong in funds, having (in 1905, which is the date of the latest returns), as regards pig clubs (for which £20 to £30 is considered sufficient), £120 to £140 in hand, and as regards cow clubs more, up to £600 to £800, and in one case even £1,440. There were at that time 61 clubs furnishing returns, 23 of them being cow clubs only, 32 pig clubs only, 2 horse clubs only, 3 horse and cow and 1 a cow and pig club combined. Membership is as a rule limited, ranging from 20 to 80. But there is one cow club in Shropshire with 296 members. Members are, as has been already explained, elected contemporaneously with the admission of their animals, after examination by the "marker," or the "marker" and the valuing committee—a small fee, as a rule 6d. per cow and 3d. per pig, being payable for the "marking." There is as a rule

* There were in 1905 1,021 pig clubs known to be in existence; but only 58 of these were registered. Fifty-three of them returned a membership of 3,457, and £1,788 total receipts, against £1,442 total outgoings.

an entrance fee payable, in cow clubs of 2s. 6d. for the first cow and 1s. for each succeeding one, in addition to 6s. annual subscription, payable by quarterly instalments; and in pig clubs 1s. entrance fee for each pig and 1d. a week per pig subscription. Sucking pigs are not admitted at all; and a heavier fee, generally double the ordinary premium, is payable for breeding sows and boar pigs. Compensation is allowed as a rule at the rate of 15s. in the £. The value of cows insured is stated generally to fluctuate between £12 and £23.

Our little live stock clubs then appear to be on a healthy footing, and there can be no doubt that they have mitigated many a loss to small cow and pig keepers. Their value to small cow-keepers, of whom the societies are made up, must be apparent from the fact that individual members have, in more cases than one, received compensation within a comparatively short time for as many as four animals. The pity is that there are so few of them. And another pity is that they remain in isolation, which must in the long run mean weakness. If the practice of insurance is to be extended, it will be necessary that there should be either federation or re-insurance, and in my humble opinion our Board of Agriculture would do far better to employ its influence and such money as it feels called upon to expend in promoting joint action among local clubs or else re-insurance—upon which German and Austrian Governments advisedly more or less concentrate their assisting action—than in offering petty doles to local clubs, after the example of the French Government.* And this because it ought not to be difficult to persuade people to form local societies by simple teaching and exhortation, whereas combining them into unions or providing sufficiently strong institutions for re-insurance

*The Government Bill of 1911 providing for this in our country has for the time been withdrawn.

undoubtedly presents some difficulties and requires to be taken up over an extended area, and accordingly with some influence to back up the suggestion. Of the value, even the necessity, of carrying combination up to a higher level there can be no doubt. The quinquennial returns of our cow and pig clubs teach an impressive lesson on this point. Thoroughly well as some little tested clubs have done, others have gone down quickly for want of additional support in trying times. Again, in France it has been calculated that in the Department of the Yonne, subscriptions of 1.66 per cent. per cow and 2.64 per cent. per horse, in societies working in isolation, might have been reduced to .96 and 1.32 per cent., if there had been federation. That example illustrates the difference between Co-operation applied purely locally and Co-operation carried further.

The most systematic attempt to organise live stock insurance in several grades, and on a national basis, is that upon which the French Government, not without reason, not a little prides itself. The disfiguring feature about it is that it is to so large an extent the result of State pressure and State subvention. Provided that certain conditions are complied with, to keep the scheme "mutual," the French Government pays £20 towards the formation of each local insurance society, with additional assistance (never falling below £4) to follow, at the discretion of the Government, in exceptionally bad years. If the first kind of assistance offered is questionable, as leading people to believe that they are rather obliging the bountiful taxpayer than providently studying their own interest, the second seems absolutely vicious, because it leads people to misunderstand the principles of insurance and disregard actuarial foresight. Such criticism is supported by the fact that the money thus far contributed by the State has gone mainly to the reserve funds. A little

more subscription or a little more federation, would therefore have made State aid superfluous altogether.

The conditions imposed by the Government, under a law to entitle societies to State aid, are these. The services given by officers of the society must be unremunerated; there must be no funds shared out among members; the premium or subscription levied must not fall below 1 per cent. of the value of the beast if a cow, nor of $1\frac{1}{2}$ per cent. if a horse; and compensation must not exceed 80 per cent. of such value. Provided that these conditions are complied with, in addition to receiving the Government assistance already mentioned, societies are exempted from every kind of taxation, stamps or fees.

Under such fostering treatment something like 8,500 local societies have come to be formed. And they are reported to be doing well in the main. There is no pressure used to make them combine. Accordingly there are not a few societies still relying upon their own resources alone—like those in the Yonne already spoken of. But the majority have combined to about sixty regional societies, re-insuring risks. In addition there are two moderately large re-insurance companies, the services of which are, however, not found sufficient for the large host of village societies existing. Accordingly the Government has a measure now on the stocks which is to create a "National" Re-insurance Society, designed to act as the coping stone of all, endowed with 1,800,000 francs of taxpayers' money and drawing in addition an annual allowance of 300,000 francs.

Barring the rather heavy draft made upon taxpayers' money, this seems the correct way of organisation. There is opposition, of course, to the newly proposed expenditure. It is urged that, at any rate before the taxpayers are asked to provide for farmers, proof should be furnished that farmers will not or cannot act for themselves. But in

the present temper of the nation it is to be anticipated that such opposition will be overridden.

Another form of insurance to which Co-operation was early applied is that against hail. However results have not favoured the co-operative method. Hail, as every one knows, is a most capricious customer to deal with. It picks out the districts to be swept over without any regard for actuarial calculations, lumping its ravages together, either locally or in respect of time, in the most unaccountable manner. Its heavy depredations in Hungary, in 1897 and 1898, causing insurance companies to raise their premiums suddenly by 100 per cent. have already been spoken of. There is even worse to tell of 1909, the losses sustained in which year caused the six largest hail insurance companies in Germany—being “mutual”—to supplement their ordinary levies by additional surcharges ranging from 160 to 350 per cent. of the former. No small folks' co-operative society could have stood such a test. In Italy the trouble is that hail visits—and that heavily—only certain districts, namely, the valleys of the great rivers, leaving the higher ground unmolested. Under such circumstances it is exceedingly difficult to secure sufficient support for co-operative hail insurance. Elsewhere insurance, whether co-operative or otherwise, is practised only partially, applied only to distinct crops, or within a fixed limit of damage. Hence, after all, the first Napoleon's advice to his countrymen seems still good, that they should insure with particularly strong companies, such as he found established in Germany, instancing more in particular one in Mecklenburg. Even in the hands of companies, however, insurance against hail is now generally “mutual.” “Mutualism” in such sense, in which its “Co-operativeness” consists purely in fluctuating premiums and elastic liability, applied under ordinary commercial and centralised management, is of course not

the same thing by a long way as "Co-operation," which makes every participant an active co-worker and sharer in the burdens and responsibilities of the undertaking. It seems, as observed, the proper method for hail insurance. Nevertheless there are some instances in which the co-operative method has been applied. Thus France, which has also co-operative insurance against spring frosts, possesses about 25 co-operative hail insurance societies, 7 of which insure only growing tobacco crops. The entire value insured by the 25 does not much exceed £1,000,000. Societies of this sort frequently find themselves compelled to fix a limit to the compensation to be allowed. Thus, in Belgium, the *Westvlaamsch Landbouwers* draw the line at 450 francs per hectare, which corresponds to about £7 4s. per acre. Switzerland, which is probably the country most fully provided with agricultural insurance, with Government support, has a few co-operative hail insurance societies, more particularly for its vineyards; but the business is circumscribed. There is also some little co-operative hail insurance in the Scandinavian kingdoms, but fortunately as a rule very little hail. Italy on the other hand, is sorely visited, as has been shown; but in spite of official attempts at persuasion, people are slow to combine. The Belgian Government has used much persuasion to induce its farmers to form mutual hail insurance societies; but there is little response. Hail is, then, a risk which, like burglary, glass, fidelity and some others, had best be left to capitalist enterprise.

In respect of insurance against fire, on the other hand, Co-operation has scored some genuine successes. And although, where there are large numbers desiring to be insured, there is much to be said in favour of the method of collective insurance by bargaining with some great joint stock company, there is also distinctly a promising opening for insurance on "dividing down" lines,

by co-operators themselves. The most brilliant results have, as a matter of course, been attained in the United States, where co-operative insurance against fire and other risks is carried on on a gigantic scale by about 2,000 societies, answering for about two million of members and bringing down the cost, in the words of the Secretary of the Department of Agriculture, to "a very few cents per 100 dollars of risk above the actual losses." Only we do not quite know how far such "Co-operation" really is Co-operation. In this country we may, in respect of fire, look for satisfactory results, provided that risks are kept within moderate limits, proportioned to the power existing for meeting them; and that for any excess there be some powerful institution to act as re-insurer. For a great point in this insurance is that the insurers should not make themselves liable beyond the limits of what their capital can answer for. That point has been thoroughly tested in our Co-operative Insurance Society, in which prudent limitation of losses has triumphantly carried the day. No insurance is now taken on any one establishment beyond the value of one third of the annual premium income. That limit of course keeps rising from year to year, as the income from premiums increases. All excess insurance is passed on to some stronger institution. On these lines the Society has kept steadily increasing its business and maintained itself more than solvent. The point, then, here pleaded for is thoroughly established, yet it is a point that is still far too often overlooked by ambitious planners of co-operative insurance.

The reason why in this application the co-operative form of insurance is so promising is that Co-operation has the power, by means of carrying down responsibility, like a "view of frankpledge," to the very units of membership, and of watching, to reduce the risk of damage more than any other method, and at the same time also to keep

the valuation within the strict limits of fact. It provides effectually against making a gain out of a conflagration, and also against damage brought about by carelessness, or defective construction, not to say worse. Of course it is desirable—even necessary, if the insurance is to be adequate—that the small local units, which in themselves cannot fail to be feeble, should be gathered together into a strengthening union or federation, so as to offer a broad front to risk. But its peculiar merit lies in its “dividing down,” and thereby creating local units with quick—because interested—and everpresent eyes, and brains perpetually and instinctively on the alert.

For the most systematic application of this method we have once more to go to France, whose people appear to possess a peculiar aptitude for organisation of this kind—coupled, unfortunately, with a lamentable lack of belief in themselves and their own power. This makes them lean more than is at all necessary upon aid to be given by the taxpayer, whose interest is not at all involved in the risk. The method applied is in substance the same as that so successfully employed in live stock insurance. And so were the motives which prompted this form of insurance. Small agriculturists, who have not much time to spare from their labour, nor any too much money in their purses, severely felt the inconvenience of insuring with great insurance companies—whose offices are often far away—involving what seemed a veritable journey, and whose rates were at the time undoubtedly high. In addition, the authorities, on their side, realised the danger of the *proximus ardens Ucalegon*, which appeared to render general insurance a matter of public duty, as it has led Governments east of France to make fire insurance for buildings compulsory.

It was only in 1900 that a law was passed in France, encouraging, without actually prescribing, “mutual”

fire insurance, by the promise of public grants. The first local society of this new kind was actually formed in 1901. And within less than ten years France counted no fewer than 2,187 local societies, comprising about 90,000 members and insuring about £40,000,000 worth of property. Such success, however, is in a large measure due to the supplementary act of brigading the local societies in "regional" federations, which Count de Vogüé, one of the leaders of the movement, rather overratingly terms the "pivot," on which the entire movement turns. It is the "common cashbox" supporting local vigilance which has produced strength sufficient to meet the calls made. There are now eighteen such federations. And above them stands the "Central" Society, to which the federations hand over one half of their takings in premiums, and which, in return, makes good to them half of their outgoings in compensations. That is a great gain. But it is not yet held to meet all requirements of the case. Accordingly it is now proposed to back up the entire system with re-insurance, to be effected by some powerful capitalist company, which is in very deed—coupled with the alternative device of passing on excess risks to other insurance institutions—the method upon which our own excellently managed British "Co-operative Insurance Society" has successfully built up its fabric.

However the prime merit lies, not with federation, but with the small local societies in which, by strict control and supervision, damage has been kept down to such a degree as to amount in 1905 to only 34.57 per cent. of the premium income, whereas in companies it stood at 53.10 per cent. In 1906 by some freak of fortune the co-operative figure went up to 61.94 per cent., as compared with 50.10 per cent. in companies. However since that year it has remained rather strikingly below, recording in 1907 46.94 as against 58.56 per cent., in 1908 43.87

as against 53.28 per cent., and in 1909 23.50 as against 50.17 per cent. And it ought to be borne in mind that the co-operative premiums, not being based upon a calculation of profit, and being liable to subsequent calls, are lower to begin with than the premiums charged by companies. And it also deserves to be remembered that all this has been accomplished, in spite of the law unkindly—and unreasonably—laying the obligation upon “mutual” societies, as a condition for their receiving “assistance,” not to reject *any* risk, however bad it may be, but to accept *all* of their peculiar kind, within their own district. We have, as will be seen, been wiser in this respect in this country. Nevertheless the co-operative method has proved successful in France to such an extent that insurance premiums rule on an average 20 per cent. below companies’ premiums. In some societies the difference is even greater. Thus the well managed *Mutuelle Agricole Incendie del’Est*, a federation, keeps the rates a full 33 per cent. below company rates.

In the Agricultural Organisation Society we have since 1908 applied the same principle in a rather different way. We have, so to speak, begun with the federation and organised downwards, constituting the local units as self-governing branches. There are good reasons for this. Under our law, as it now stands, there can be no insurance unless at least £20,000 paid up share capital can be shown by the insuring institution. That altogether precludes the formation of parish societies as independent units. In other respects we are more favourably situated than our neighbours in France. There is no law to prohibit our sifting our cases and rejecting bad ones. That is answerable for a great deal. Sifting is far the best done on the spot, by neighbours who thoroughly know the properties and their owners. It is accordingly entrusted to local committees, who in return for their services

receive a commission of 15 per cent. on all business which they bring to the Society, in addition to one-third of the net annual profits resulting from such business. Such local committees are required to report up to headquarters, where insurance is actually effected by the Society as a whole, the local committee still acting as interested watchers, being shareholders, and also having a contingent right to part of the profits. It is rather too early still to report results and to judge if we should not have done better to insure with the Co-operative Insurance Society, which would certainly have been equal to the charge and would of course have derived additional strength—needed, while the Co-operative Wholesale Society was casting wistful eyes upon it—from the new custom. Our business has extended so as to embrace over a million of property insured. It will be interesting to watch its further progress.

The business done by the Co-operative Insurance Society of Manchester, although fully co-operative, is otherwise too little specifically agricultural, and too much centralised, to call for notice here. The Society has been very successful; and one of its distinctive operations is so interesting and ingenious that it seems to deserve mention. It applies to Life Insurance, which—for the present, at any rate—agricultural societies, with their small limited membership, will do well to leave alone. It is different where numbers of small men are gathered together in busy bee-hive stores. A Store availing itself of the insurance—there are now already about 330 societies with about 570,000 members doing this—is called upon to pay one penny annually for every member, whose account is of course charged with such payment. The benefit to be received in the event of death is determined by the value of the insuring person's purchases with the Store. Every £1 disbursed with the Store

entitles to 4s. benefit, or, where husband and wife are joint members, to 2s. for the wife and 4s. for the husband. To be just to the Society and fair to old people, for ages from 63 upwards purchases are reckoned, not for one year, but for the average of from three to ten years, according to advancing age. This in no wise goes against the insured person's interest ; for old folk are likely to have purchased more heavily in preceding years than in the last. And to prevent abuse by people buying goods beyond their own wants, in order to resell, a maximum limit is drawn, for the 4s. beneficiaries at £50, and for the 2s. beneficiaries at £25. The system has this advantage that it saves the Insurance Society an enormous amount of labour in respect of bookkeeping, which means that it saves the insured an enormous amount of outgoings, so much so that management expenses come to be reduced to about 5 per cent., as compared with about 43 per cent. in Companies, and that accordingly £1 premium will purchase 19s. of direct benefit. This is effected by the Society making the Store its bookkeeper. At the same time it imposes no additional labour upon the Store. It is truly a triumph of co-operative principle applied to insurance. Possibly the time may come when agriculturists likewise will be able to benefit by such a scheme.

In any case one may take it to have been shown that there is a good deal of scope for the employment of co-operative methods in insurance.

XII.—CO-OPERATIVE CREDIT.

In its connection with Agriculture Co-operative Credit should command quite peculiar interest among all forms of Co-operation adopted. For not only does it supply that without which other forms of Co-operation could scarcely be carried on, that is, money; but, in addition, it has also by further effects given proof of its remarkable power of suggesting and generating such other forms of Agricultural Co-operation. The foremost country in respect of Agricultural Co-operation at the present time is Germany, which possesses about 26,000 registered agricultural co-operative societies, and has a larger out-turn of co-operative produce than any other country. However, before Credit Co-operation came on the scene, in Germany Agricultural Co-operation was practically non-existent. It was Credit, the command of money, which gave all other Co-operation the start, stimulating the taste for it, and providing the means with which to set it up.

Co-operative Credit has this to distinguish it from all other forms of Co-operation:—Whereas they all come into the field with money, or else visible and tangible money's worth in their hand, wherewith to purchase the desired commodities, Credit to all appearance comes forward empty-handed, with nothing but a want, to be satisfied with borrowed money. Such appearance is misleading, as we shall see. Credit after all brings very good money's worth with it—or it would not be entitled to the money that it asks for. Only, that money's worth is not otherwise recognised by the banking or depositing

market. Hence capitalists and depositors cannot lend upon it. It speaks, so to put it, a different language from theirs. It is based upon conditions of which they know nothing.

The peculiar task, the crux of its office, accordingly is, not to beg for large supplies of money, but to make the latent raw material for security—which security is the only thing which will legitimately buy credit—effective in the market, to which in any case it has to go for its supplies. Once that object is attained, there can no longer be any need to look about for money; money will come of its own accord; there is plenty of it in the world, and it seeks eagerly for employment.

Such explanation ought to make it clear what a grossly mistaken policy those pursue who, putting the cart before the horse, ask for money before they have their fabric ready, in a condition entitling it to receive such. It means waste—a possible white elephant, such as money must needs be for which there is no employment. It means, moreover, temptation to business which would run altogether counter to co-operative principle. For Co-operative Credit, so it is generally admitted, should provide cash *only for productive or provident outlay*. It must furthermore mean a precarious position, because it means dependence upon some one else who may withdraw to-morrow what he has given to-day. It means dearer money than a bank could obtain for itself by deposits, ~~when obtaining the~~ cheapest possible supply of money must of necessity be its object.

This being explained, it may not be amiss just briefly to recall what is the object of Co-operative Credit.

It is not to supply capital for fixed outlay, as those appear to assume who currently talk of “agricultural” banks as “landbanks.” It is also not to provide money for anyone who asks for it. It is, in the present connec-

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tion, to provide Agriculture with ready-money for the one purpose of making such Agriculture more profitable. In modern times Agriculture requires very much more working capital than generally speaking it is supplied with. Such money may, if rightly applied, earn a very good reward for itself—much better than that for which it may itself be hired. Hence, so far as such conditions apply, it is perfectly legitimate to borrow it for the purposes indicated. However, the application of the conditions stated is essential. There must be a good chance, a moral certainty of the money lent reproducing itself with increase. Therefore the object kept in view should, as observed, be either directly productive, or else at any rate distinctly provident. Effecting an economy by buying in large quantities, or for cash instead of on credit, or at the most favourable time; or else replacing a usurious debt by a cheaper one—all this comes legitimately within the terms of our conditions.

So much for the object. Now for the means.

Nobody can reasonably find fault with our financial institutions, or even our depositors of savings, for not having hitherto accommodated themselves to the conditions of agricultural credit business, which as a rule demands longer and more elastic credit than do Industry and Commerce, and which has rules, habits and, so to call it, a language differing from those of the banking world. That is the very difficulty to be combated. There are two ends, each good and useful in itself, waiting to be joined together—money on one side, want with excellent, but for the moment unshaped, security, on the other. But the two require a link to unite them. Such link can only be supplied by a new kind of institution, standing between the two, close—that is, a most essential point—to the seekers of credit, and speaking, to adhere to the simile impressed, their language, but also speaking the language

of the money world—understanding the small rural inhabitant's wants, and also his security, and capable of making that security effective and bringing it, in a form that a banker can understand and appreciate, to the banking market.

The raw material of security among rural folk is not, as is often assumed—so it may be well to point out—their possession of land and buildings. The quite heterodox opinion that it is has been given expression to even in Germany—where indeed most land affected by co-operative credit is freehold, but where none the less the rule is generally accepted that the security given should be personal. In Italy, where Agricultural Credit is as freely practised as in Germany, very much of the land to which it is applied is, in contradistinction to Germany, leasehold land, or land held at will. This applies also to Belgium, and likewise to France, so far as village tradesmen come into account, for whom the *caisses rurales et ouvrières* are distinctly also intended. Indeed, real security is what co-operative banks—like others—should particularly seek to avoid, except it be as collateral security. When seized, it becomes exceedingly burdensome, and also uncertain; for its price fluctuates. Co-operative banks were created to deal out *personal* credit, which is the most convenient, the least costly, the least burdensome, and also the most educating form of credit that there is. All the more reason is there to take care that it is made safe.

M. Luzzatti has put it that the security of a co-operative bank is "the worth of its members." Such "worth" has of course first to be ascertained and made effective. And it may be made effective in one or other of two ways. The members—that is, the persons who combine to form the bank, because from time to time they require credit—may lay down a certain sum of money each, as first security for what they propose to borrow, leaving good

management, as evidenced in periodical balance sheets, to be well advertised—the “maximum of publicity” that Sir R. Morier asks for—to answer for the rest. Or else they may combine, with or without taking shares, but pledging their entire possessions, without limitation, one for all and all for one.

This explanation will have to be supplemented by further details.

In the first place, under either form of organisation the local bank, which is to serve as intermediate link between the rural population and the world which is to provide the money, begins by creating a select *clientèle*, elected for their presumable trustworthiness, to whom admission to credit is rigorously restricted. Such condition provides a first safeguard, which may be made very effective, more particularly when unlimited liability is brought into play, providing that members generally will have to answer for the default of any one among their number. That consideration gets rid of all etiquette and makes first election, and subsequently other dealings, searching.

The bank next takes into account either the financial value of the member asking to become a borrower, or else the employment of the loan itself, which in this way becomes a pledge for its own value. In this case the borrower—who, of course, has also to provide security in the shape of sureties or otherwise—is tied down to one particular employment, which the Committee have considered and found legitimate and promising, on pain of having his loan summarily called in and the sureties made liable. In the other case, members, being possible borrowers, are “appraised” for credit, and their “value” is entered in a register which is kept strictly private, in the manager’s desk. Up to the figure there named the manager becomes authorised, supposing that there is money in hand, to make advances to each member, with or without addi-

tional security, as the Committee may have determined ; but not beyond that point, except there be quite unimpeachable security tendered, or unless the Committee decide that in this particular instance he may go further.

In the last place, to put things very briefly, the bank—which does not work for profit and pays only a moderate limited dividend upon its share capital, where there is any—makes a point of adding steadily and systematically to its reserve fund.

The same regard for safety involves what is a standing rule in all co-operative banks of every description, namely, that in the investment of money no risk whatever should be incurred.

One indispensable corollary to the principles here laid down is this, that in the conduct of the bank's affairs there should be plenty of careful and searching checking. Just because people seek credit upon only a slender ready-money basis is it necessary that every precept laid down in the interest of safety should be strictly enforced. "Your system of *strict payments* and watching the *employment of the loan*," so the late Duke of Argyll wrote after reading my Village Bank Rules, "is admirable." Checking and controlling is accordingly the fibre which runs through the entire organisation, like the sympathetic nerve, ugly customer that it is, through the human body. People sometimes rebel against this, grudging the trouble—so long as nothing has gone wrong. But in plain reason they must consent to give in elbow grease what they cannot give in money. In a well organised co-operative bank borrowers are checked, the Committee is checked, and the bank itself ought, if possible, to be checked by a more experienced body, so that nothing can go wrong.

It may at once be said that wherever in such banking anything has gone wrong the fault has invariably been found to lie with defective checking.

How these principles apply in practice will best be shown by a brief exposition of the two main systems in operation.

So far as people desiring to combine for the purpose of co-operative credit have a knowledge of business and sufficient ready cash to warrant such course—therefore under all circumstances among our larger farmers—the system of shares and limited liability offers the greatest advantages. It ties people less than the other, it is adaptable to all circumstances and sets no limit to working districts. It presupposes the formation of a small capital—to serve rather as a guarantee than as working funds—by the taking up of shares, which in our country it will be best to fix at not too high a figure, but to make payable within a rather narrowly limited time, say a year or two. In Germany and Austria, where unlimited liability predominates even in share banks, a different practice prevails. Shares are there purposely made large, up to £50, and plenty of time is allowed for paying them up. The same rule applies in some very successful banks in Switzerland. Elsewhere—and most notably in Italy—small shares—the number of which may under our Act be carried up to the value of £200—payable within ten or twenty months, and coupled with limited liability only, answer equally well. The value of shares may be fixed at any figure, down to a few shillings. However, a small share capital will of course purchase only small credit. On the other hand, large shares will keep out smaller folk. Whatever be the value of the shares, it must not be they which determine the voting power of members in the bank. The bank is to be “co-operative”; that means that it is to be a union, not of capitals but of persons; and, whatever be the holding of each member, the voting power must be equal as among them.

The main point is that there should be good manage-

ment, which means not only that there should be a competent and active Committee—meeting as often as business may require, and being itself periodically supervised by a Council of Inspection, as a protection to itself as against importunate credit-seekers, and as a protection likewise to shareholders against possible carelessness or excessive complaisance—but also that, as observed, no bank money should be lent out except on good security and for remunerative employment. It is for banks of this order that the credit register already spoken of has been devised. There is no need in this case of very minute investigation; the general conduct of the member will vouch for proper employment; but it is necessary that some discrimination should be used, and that discrimination should also be practised in the election of members, so as to make the very election some sort of guarantee.

By means of banks of this type very large districts may be served—provided that there are persons distributed over it on whose judgment, with regard to the eligibility of newcomers, and the legitimacy and safety of loans asked for, reliance may be placed.

The other system in use is much less elastic in its application, but it is applicable to a very much humbler stratum, to men with very small means, and indeed, without any—except a good character, vouched for by neighbours, be made to count as such. Under it there need be neither shares nor entrance fees—although there may be both kinds of payments on a modest scale, which must in any case be so fixed as not to keep out any one who has a moral right to admission. Shares were at the outset ruled out altogether for two distinct reasons. The first was that every one whose honesty could be vouched for should be able to join, even though he be as poor as a church-mouse. And the second, that all possible cause of conflict between opposed interests—money and need

—should be carefully excluded. A share suggests dividend; and dividend suggests its own increase—which leads straight up to dualism, money standing on one side, aiming at liberal remuneration, to be got out of borrowers; and need on the other, liable to be crushed by such capital. However, the bank was intended in the interest of need, with money coming in only to help, not to exploit. It is the *borrower's* interest which must rule supreme.

Since there are no shares, there must, as a security to lenders, be unlimited liability, of all for all, with—partly for the protection of the persons so made liable—care taken to accumulate—gradually though it be, but steadily—a fund belonging to the bank *as such*—that is, not divisible—to serve as first security to creditors.

Unlimited liability, once it is understood, is of a nature to secure quite as much credit as a small people's bank is likely to require. Only it ought to be borne in mind—it seems often to be forgotten in this country—that it is submitted to as a safeguard to the lender and must therefore not be illusory but real. People must not be allowed to slip out of it unobserved, as is laid down in some "Model Rules," depriving the lender of his security. And people must not be allowed to pledge their "unlimited liability" in more banks than one. Doing this would of course limit it at once and might make it altogether nugatory. This point does not appear to be fully realised in this country.

Unlimited liability is also wanted in the interest of the bank itself, to ensure that members elected to office will work to the best of their ability. This applies not by any means least to the wealthier members, upon whom actually greatest liability will fall. Their credit is to assist the bank; but their knowledge of business and experience are to assist it at least as much. They are not likely, however, to give such value unless they are

unlimitedly liable, because what would be to them a small limited loss would have no terrors for them. They have plenty of means for protecting themselves open to them. In the first place it is an accepted rule that the members of each bank should themselves, at the beginning of each year, limit their own liability, while leaving it unlimited to the outside world, by fixing a certain figure beyond which no credit may be given—so much to the individual, so much collectively. But beyond that, the wealthier members are sure to be allowed representation on the governing bodies and to have a full say, since the bank *wants* them, in order to have security to pledge, and is sure to heed their protests and warnings, for fear that they should go out—which, at any rate in the earlier stages, it is advisable that they should be at liberty to do at any time.*

Unlimited liability inexorably requires what is in this connection desirable also on other grounds, that is, small districts. It would become distinctly dangerous were it applied to organisations in which there is not constant close touch among members, good knowledge of one another's business, position and character, and the possibility of constant automatic observation. In these little banks the election only of trustworthy members—advances being by standing rule restricted to members only—is of even more vital importance than in the larger ones already spoken of. And hence their great educational value, which priests and ministers have pronounced superior to that of their own teaching, and to which judges and Government officers have borne ready testimony. For membership in the bank is worth something to people.

*The new German Rules require at least six months', but in some cases two years' notice, to take effect after the term fixed, provided that that period falls within the current of the financial year. In justification of this it has been pleaded that circumstances have materially changed.

Job is not expected to "serve God for nought." But he must *serve*, that is, he must be known to his neighbours to be honest and provident, or he will not be elected—or, being elected, will be turned out again. Hence a goodly number of men have been taught to forsake the bottle and evil or careless living in order to qualify for membership.*

The necessity of mutual knowledge and touch does not end with the election of members, that is, customers. The pledging of unlimited liability being committed to officers, it is indispensable that the qualification and trustworthiness of those officers should be known. And every member being made responsible for the liabilities of every other single debtor, it is essential that the latter's employment of his borrowed money should not only be carefully judged, but subsequently watched, because its employment becomes a pledge for the loan. Now all this is not attainable unless there is touch and instinctive observation, which is possible only in a society with a small area, in which full publicity becomes almost a matter of course and is automatically provided. The loan business is not carried on behind a screen, as in a "Loan Society." Members know what other people are members, who has borrowed money, what for, and how he is repaying. There is only one thing which they do not know and must not know, and that is who is a depositor, and what his deposits amount to. All such publicity and mutual knowledge is indispensable. It is the substitute for the cash deposit in share money which members, as we presume, cannot make. But it is practicable only in districts geographically small. The ordinary parish supplies the best size for a district, and it also at the same time provides that which is as desirable as a suitable size, namely, a

*The remarkable efficacy of co-operative banks in bringing this about is more fully shown in the Author's "People's Banks."

constituency with a natural bond among its components, without which it is difficult to establish the moral influence of one member upon the other that there should be. However, no hard and fast line can be drawn.

The mechanism of such a bank is then this. A very small number of members is sufficient to start the bank. Our law requires that there should be seven. There will, as a rule, be more. Such members elect their Committee, which may consist of only three, though in larger banks five will be preferable. It is not a bad plan to elect the chairman independently of the Committee, to become its *ex-officio* head, but to hold office directly under the General Meeting. The Committee elects new members, receives whatever money comes in and deals out loans, every one of which lastnamed must be specially approved, as being legitimate for the particular applicant and promising to more than repay itself. The loan wants to be granted to such amount and for such a period as will admit of its accomplishing the desired work and repaying itself out of its own proceeds. Otherwise the borrower would have to tax other sources of income, which would mean to him embarrassment rather than assistance. If the loan be granted for more than a year, it should be made repayable by instalments. The Committee should be very strict with respect to repayment on the proper days and employment of the loan. It may grant extensions when called for; but they must not be taken without its leave. Every loan should be duly secured—best by sureties, whose signatures should be verified.

In one respect care is taken from the outset that the Committee should not in their granting of loans be exposed to undue influence. They are made to serve without any remuneration whatever—out of pocket expenses alone being allowed for. Only the secretary, or actuary, or whatever you may please to call him—the man who keeps

the books and personally deals out and receives the money—is allowed to draw a salary, which the circumstances of the bank will of themselves enforce should be moderate. On the other hand this man is allowed no voice whatever in the granting of loans. Under such circumstances the Committee-man is secure from the temptation to grant a loan because his remuneration is worth something to him and the applicant may threaten not to vote for his re-election if it is not granted.

However human feeling is strong among neighbours, and the Committee-men, if left unsupervised, might only too easily, from kindness, or weakness, allow themselves to be prevailed upon to “stretch a point,” which might imperil the interest of the bank. To protect the bank against this—and also to serve another purpose, still to be spoken of—there is a Council of Inspection, which is required to overhaul all the business done at least once every three months and point out irregularities or sources of danger, and also to judge whether the Committee has used its discretion rightly. With such an authority on the watch, the Committee-man is armed against undue importunity, and is otherwise placed upon his good behaviour. If pressure be put upon him by applicants, he can point to the Council as holding him responsible. In new countries and new banks people are apt to question the necessity of such supervising body, for which it is not always easy to find men. And for a little while a small bank may intelligibly do without it. However, whenever loss has occurred—through dishonesty, embezzlement, or sheer carelessness—the mischief has invariably been traced to the absence or remissness of a Council of Inspection.

That Council is, as observed, to serve another purpose besides supervision, which purpose is by its own annual Report, supplementing the Report of the Committee, to make the General Meeting fully cognisant of what is going

on, in order to enable it to understand the precise position of affairs the better. Without such comment to the Report a meeting of plain rural folk might experience some difficulty in grasping the meaning of what is placed before it.

There is another important point which remains to be considered, namely: how are banks of either order described to obtain their funds? They cannot do business without, and on their first formation they are likely, in a purely business way, to appeal to existing financial institutions, and even to the great body of depositors, in vain. The paltry payments made on account of shares will not go far. And entrance fees can at most serve only to cover the outlay for stationery, books and the like.

Ultimately the main source of cash for co-operative banks of both kinds should be savings deposits—from any one who chooses to make them. The bank's declared object is quite as much to promote thrift as to facilitate credit. And deposit money is not only the cheapest, and the safest source for such—as being less liable to withdrawal in large quantities than other loans—but also the source which secures to the bank greatest independence. Without independence the bank cannot count upon becoming permanent and permitted to do its work unhindered. It should make it its endeavour to become the favourite savings bank of its district. Experience proves that in the long run depositors prefer it to the public savings bank, because it is their own, connected with their own locality, officered by their own nominees, and keeping the money collected fructifying in the district, where its benefit may be seen and gauged—instead of sending it up to London, “to appreciate Consols.” Having a more remunerative employment for its money, it will also as a rule be in a position to allow a higher rate of interest.

However, at starting the bank will find such prospect to be still only “music of the future.”

To supply it with first funds it has been proposed to create an Endowment fund, or Financial Institution, which is to be called—for a long time miscalled—"Central Bank." Experience has not proved favourable to such method, for reasons which it is not difficult to divine. In order to "force" co-operative credit—once its merits were recognised—foreign Governments have expended large sums of money and employed powerful official influence as well—providing first cash for co-operative banks which rural populations did not care to form of their own accord, but were strongly urged to form. The banks have been formed, of course, and they are outwardly co-operative; however, the co-operative character which gives backbone and stability to such an institution is wanting. Parasites these banks have been created, and parasites they remain. "First" cash proves a euphemism. The source once opened is kept continually running. Why, indeed, should people exert themselves and practise self-denial to create funds of their own, when there is a Little Providence ever ready to supply them with such? The consequence is that they remain dependent upon external help. They become pot plants, failing to strike root. And no pot plant ever bears much fruit.

There is more. A "Central Bank" is an extremely useful institution when really "central," that is, when made the centre of a system of banks already formed. In such position it may equalise the want of one bank by drawing upon the over-abundance of another; and, whenever occasion arises, it may "tap" the great money market. It will then be in its proper position as the *servant* of the other banks, under their control and doing their work. But if you start with a "Central Bank" and make it "finance," that is, create, local banks, which otherwise no one calls for, the position becomes reversed. The "Central Bank" becomes the *master*, studying its

own interest. The position of affairs becomes further aggravated by this fact that the "Central Bank," being the only central institution existing at the outset, is not unaccountably to be employed to prescribe to and control the local banks, which ought, under reasonable conditions, rather to control it. And so we get that mischievous feature of "patronage" stereotyped, which has thus far marked all attempts to "create" co-operative credit from the outside, but which means the death of genuine Co-operation. People whose qualification for the task is questionable, even if their pretension to its execution be legitimate, presume to settle for others, who are to bear all the responsibility, how they are to deal with their money and their liability. That is not Co-operation; and it cannot yield good results. People in every local bank will have to decide for themselves what they choose to do. Since they are responsible for themselves, which is the backbone of the whole matter, they must also be entirely their own masters. You cannot turn Co-operation into a mere puppet show, in which someone behind the scenes pulls the strings, without destroying its character as Co-operation. The "Central Bank," if there is one, will have—if a creditor—a creditor's right to inspect accounts and send interrogatories. But it must be understood that it does this purely in its own interest, in no way in the interest of the local banks—which interest is, in such case, distinct from its own. The inspection from outside, or from above—by which indeed local banks are likely to benefit greatly, and which it will be well to introduce as soon as there is a Union of such banks to practise it—should be inspection carried out in the interest of the banks.

In all probability, if only people in this country knew what serious difficulties and embarrassments "Central Banks"—formed under the impression that theirs would

be an easy task—have had to struggle with, they would be less keen upon starting one—possibly to serve as a rod for their own backs. There is not one which has not found most troublesome difficulty coming upon it, such as has in the principal cases concerned led up to the very precipice of insolvency and liquidation. The Schulze-Delitzsch Central Bank has been forced to seek salvation in amalgamation with the Dresdner Bank. The Raiffeisen Central Bank has escaped insolvency only by a substantial levy made upon its constituents. The Haas Central Bank is known not to be in the strongest possible position. Even the Central Banks and Endowment Funds formed by Governments with public money have their own tales of troubles to tell. The wealthy Government Bank of Prussia has had its intended beneficiaries rising up in rebellion against it because it disappointed them, and at last has found itself repudiated by the very societies for whose benefit it was created. It is not altogether easy to manage a Central Bank.

In either class of banks, as has been pointed out, the aim pursued should be, steadily, though it be only gradually, to add to the capital in the hands of the bank. Where there are shares, members should study to add to their several stakes in shares; in either type they should, if possible, add to their stake in deposits. But the bank as well ought to add to its collective holding by an accumulation of reserve funds, which can scarcely proceed too far; for what the bank is called upon to proportion such reserve to is not really its share capital, but its liabilities. There are co-operative banks with reserve funds considerably larger than their share capital. Twenty per cent. of the annual surplus should invariably go to the reserve. In the unlimited liability banks the need of the steady creation of a reserve fund becomes absolutely indispensable. But in their case—more especially since

there is to be no incitement to the study of individual self—the reserve fund is by standing rule made the collective property of the bank, *never* to be shared out—not even in the event of the dissolution of the bank, lest there be a temptation to liquidate for the sake of the spoils—as has in very truth happened in the case of the very first bank of this kind formed, without such a rule, the necessity of which was then not yet recognised. While the bank exists the fund may be drawn upon to make good deficiencies. Should the bank be wound up, it is to be handed over to Trustees for suitable public employment. By this means, in course of time, a very respectable amount may be accumulated, which cannot fail materially to strengthen the position of the bank.

However, all this is at first far off, and calculated to increase the capital of “guarantee” rather than the “working” capital. It is very desirable that arrangements should be come to with Joint Stock Banks, under which such institutions may be found willing to make advances, not as an act of patronage, or of “financing,” but as a simple business transaction—money being given in exchange for security. That will be a substantial help during the infancy of the bank—and again in later life in times of tight money, before there is a Central Bank. Bankers, when the principles of co-operative banking are explained to them—though such differ in detail not a little from their own—as a rule quickly discern its security. And of course, in addition to procuring for them a safe outlet for some little superfluous money, co-operative banking may be made to act as a convenient feeder for them, bringing them more regular business.

Beyond that the only safe and legitimate resource for co-operative banks is that which has been in use for about sixty years and found serviceable and effective. Friends of the movement may well be asked to come

forward and raise—or else guarantee in cash credits—the first small funds—not as a gift, God forbid! That would injure the banks instead of helping them; but in as businesslike a manner as can be managed. It will not be for long. Co-operative banks, once they have secured a good foothold, readily ingratiate themselves. It is absolutely idle, after such assistance has proved its sufficiency during sixty years abroad, to pretend that it would not be practicable in this country also, that on the contrary here, in this country, more identified with business habits and command of money than any other, there must be a “Central Bank” to act as fairy godmother. Schulze had to beg for his first cash, and so had Raiffeisen. Their obtaining it has acted like the familiar bucket of water which in days of the old draw pumps we used to pour down a new pump, in order to set the sucker at work. Once the sucker was filled it drew up plenty of water from the treasures of the soil.

Once such banks are established, so long as they are properly conducted, they will accomplish almost anything for which money is needed. They will provide money for the individual member, they will provide money for societies. It is very common, for instance, to establish a dairy with the help of a co-operative bank, which provides the money and repays itself at the rate of so much for every gallon of milk used. There is costly machinery—for instance, modern threshing machines with steam or electric motors—which the bank has bought with its borrowed money, and the price of which members (and, for the matter of that, also non-members, to whom it has been let out at a higher rate) have repaid out of the dues for the hire of it.

Only it is essential that the bank should be soundly organised and well conducted. The share banks, handling money which comes in and goes out, for what length of

time nobody can foresee, will do well to limit their advances in each case to a short period only, although of course they may renew. The unlimited liability banks, having pledged the enduring liability of their members, may lend out money for long terms, provided that there is sufficient cash at their disposal. Either type should lend as little as possible on mortgage or on whatever other security locks up capital or would be inconvenient to hold, should it come to be seized. It should study to make the security employed personal. There should be inexorable strictness with regard to the observance of rules and undertakings, not only as to repayment of loans. And every chink and crevice ought to be closed against risk.*

Albeit mortgage credit is, for banks of the order here spoken of, by common consent placed on the taboo, since nevertheless it is actually practised to some little extent, and in at least one case has been practised with distinct benefit, it may be well to say just one word about it. There is not much prospect of its being put to any extensive use among ourselves on co-operative lines. And, barring the *Landschaften*, which are an institution *per se*, its general application abroad has scarcely turned out encouraging. The principles upon which ordinary co-operative banks are built up appear of themselves to conflict with its practice.

The reasons why mortgage credit is not suitable for co-operative credit institutions of the type here spoken of are that it locks up money for a long, it may be an indefinite, time; and that the security given, if it should have to be seized, would be likely to prove, to an institution situated as a co-operative credit bank is, a veritable white elephant. The co-opera-

*For Model Rules and directions how to apply them, under either of the two systems here spoken of, consult my "A CO-OPERATIVE CREDIT BANK HANDBOOK." 1s. net. P. S. King & Son.

tive credit bank relies for its funds upon withdrawable deposits and bankers' advances. These things will not bear the strain of mortgage loans. To be able to grant them you must have long term funds, such as the *Landschaften*—which are in a sense co-operative mortgage banks—raise by what we should call debentures or land-bonds, running for just as long as the loan runs. That is not practicable in this country owing to our land laws and the trouble connected with establishing a title.

In one case, in France, co-operative rural banks have, indeed, furnished mortgage credit to good purpose—fortunately without loss, because everything went well. The circumstances of the case were these:—After the current rate of mortgage interest had gone down from the old-fashioned 5 to 3 per cent., the small capitalists, lending to small proprietors, whose demands the *Crédit Foncier* was too "big" to care to satisfy, continued—having practically a monopoly—to insist upon the old, now extortionate, rate. They were not aware that things had changed. Under such circumstances M. Louis Durand, the founder of the French *Caisses rurales*, considered it legitimate to intervene. His societies held their deposit money—plenty of it, and "good lying money"—at $2\frac{1}{2}$ per cent., and began lending it out, within what were considered safe limits, on mortgage at 3 per cent. As soon as the matter became known, the small capitalists, brought to understand that money had become cheaper, were not long in coming down to the same rate—which was just what M. Durand had desired.

Mortgage credit has been a great deal abused. Hence President Dupin's well-known aphorism that mortgage credit "supports the debtor as the rope supports the man hanged." Abuse arose because such credit was improvidently taken for other than productive purposes; and because its continuance or determination was made

dependent upon the will and pleasure of the creditor. A mortgage might be contracted for a definite period. But the time would come when notice could be given, such as might greatly embarrass the debtor.

Co-operative mortgage credit, where it has been found practicable, being organised for the benefit of borrowers, has never fallen into these mistakes. It has imposed conditions upon the borrower to prevent depreciation of the security. But it has on principle granted the loan, within the limits provided for by gradual repayment by sinking fund, *quandiu*, securing possession of the credit to the borrower, coupled with the right on *his* part to determine it sooner, if he should so please. Under such conditions the relation established between borrower and lender becomes reversed. It is the borrower who decides when to determine the credit. And by that very fact lending by individuals—who could not be expected to part with their money on such terms—becomes excluded and resort to a many-headed body which does not suddenly want its money back for other purposes becomes a necessity. Such arrangement gives security of credit, and also very much greater cheapness of repayment.

It was the Prussian *Landschaften* which inaugurated this new type of business. Their example in this respect has been widely followed by other bodies dealing in mortgage credit.

However, this point being settled, the further question arises: how to provide the means for granting the credit—means of which there must be a command for as long as the credit is to last. The *Landschaften* proceeded upon lines very similar to those which have in another connection become identified with the "Raiffeisen" system, that is, by pledging as security for the money to be raised the entire, collective, unlimited liability of their members—the whole of their possessions, movable as well as

immovable. That security was, on the face of it, so good that the land bonds issued to provide the desired money—being paid off by drawings—soon became a favourite investment with the public, at times even in preference to Government stock.

In a sense the *Landschaften* are co-operative organisations, but not fully so. Their system would be quite inappropriate to this country. There is accordingly no need to enter further into their organisation.*

Those who form banks will do well to take care that they employ an organiser with a practical knowledge of co-operative banking. He should have seen good co-operative banks—such as at present we find only abroad—at work. These things are not learnt by reading only. One of our best organisers in India—I should say the very best—whom I personally introduced to the leading authorities on Co-operative Banking in Germany, has admitted, to me that what really gave him the mastery over his subject, for which he has become recognised, was the four weeks which he spent at Neuwied and among the Raiffeisen banks established in the neighbourhood, sitting at the Committee table and seeing the thing done. I do not think that anyone should be employed in organising who has not qualified in the same way. The object at stake is the property of other, confiding people. Co-operative banking is absolutely easy once you have grasped its guiding principles. But as soon as, from ignorance or any other cause, you depart from these, or neglect them, hunt after money, and try your hand at shifty devices, just to avoid some little precaution which seems irksome but is necessary, the bank is apt to go wrong. And wrongness in such a matter may mean a great deal.

* On this point see a special chapter in the author's "Co-operative Banking." P. S. King & Son.

XIII.—CO-OPERATION FOR COMMON WORK, COMMON USE OF MACHINERY AND OBTAINMENT OF POWER.

The same considerations which have led people to co-operate in purchase and sale have very naturally also prompted them to join their individual forces together for the execution of work of a class which is best carried out in common and, once machinery and "power" appeared on the scene and came to be profitably employed in Agriculture, also for the obtainment of such. Similar Co-operation is practised in Industry. We have our co-operative workshops and factories; and, as regards "power," such is freely subdivided among the cutlers of Sheffield—although not on co-operative lines—for the use of a number of small producers. In its most elementary forms such Co-operation is probably as old as the human species. Among its earliest known applications—not to enter too fully into historical details—we have the *fruitières* of the Jura, using common plant, the *alpage* societies in Switzerland pasturing members' cattle in common, and the *wateringues* in Belgium, from which the French *associations syndicales*, now represented by close upon 6,800 societies, have sprung (about a year ago there were 6,749), and which are closely related to the German *Deichgenossenschaften* regulating the flow of water and providing for surface drainage and irrigation. The lastnamed three varieties are, to a large extent forced upon riparian owners by law, and endowed with powers as public bodies for executing their appointed functions.

The German *Deichgenossenschaften* for the most part come under this description; and so do practically all Belgian *wateringues*. In France there are some *associations syndicales* prescribed by law, others merely "authorised," which means that, to entitle them to enforce their will in levying contributions and executing work, they must be supported by a unanimous vote of their members; and a considerable number also are organised in full independence and therefore essentially "co-operative." The work committed to these associations is surface drainage, irrigation, warping, the construction of roads and similar operations. Such work being frequently a "one-job" business only, of short duration, not a few of the *associations* are purely ephemeral. A considerable number however are permanent, and in fact date back a respectable length of time. As many as 4,900 were formed before 1865. The doings of the *associations* are, deserving of notice; but there does not appear to be much scope for precisely similar work in this country. In the matter of water supply, indeed, their example may in some instances prove worthy of imitation, and possibly also of irrigation, for the execution of which, in the United States, there exist many thousands of co-operative societies. There are a good many co-operative societies carrying out water-supply abroad, more particularly in Germany. There are 35 in the province of Hanover alone. And we have had some beginnings in this country. There was, for instance, the Far Forest Water Supply Society, which began work in 1902. And there are not a few schemes in operation on what may be called co-operative lines, all over England, beginning in the North Riding—co-operative as among adjoining land owners—which are described as having proved entirely successful. In this way fairly large districts, like the Rural District of Thirsk, having a population of between 3,000 and 4,000,

have been provided, as well as small, like that of Coxwold, with only 3r3. Mr. F. Graham Fairbank sums up the advantages of Co-operation in this matter in the following words:—" 1. By Co-operation a sufficient sum of money can be raised to enable a source of water to be tapped, unquestionable as to purity, softness and quality; 2. Co-operation ensures extreme economy in maintenance and management; 3. Co-operation enables the smallest community to provide itself with a really good water supply."

In France common work, more or less co-operatively organised, has found other outlets for its employment. During the last decade or two farmers have endeavoured—they contend, with success—to protect their crops against hail by firing off salvoes in rapid succession from a number of guns shaped like huge gramophones. The reports of such salvoes are said either to drive away the hailcharged clouds altogether, or else at any rate to break up the hailstones within them into perfectly innocuous soft snow powder. The trouble was that it required skilled bombardiers to fire off the guns; and these men not unnaturally shrank from the penance of getting up at night to cannonade the sky. This difficulty has been got over by the introduction of the "Electric Niagara," which acts by itself.

Another application much given to common work in France is that to keep off nightfrosts in vineyards by fumigation. Spring frosts are deadly to vine blossoms. Clouds of smoke, generated at appropriate spots, come between the frost and the vines and shelter the latter. This service likewise has been more scientifically organised of late. Vine growers of distinct parishes form themselves into co-operative societies which provide open hearths at fixed suitable points. A central point is furnished with a "pagoscope," which indicates in the

evening whether there is danger of a coming frost. In that case one shot is fired, to put members on their guard, and a watchman is placed by the "pagoscope" to observe the further movements of the thermometer. Should the temperature descend to close to freezing point, a second shot is fired, which at once brings out the members due for duty to their appointed posts, where fires are forthwith lit. Each man is allotted 40 hearths to keep alight, which are placed pretty close to one another. At Cadillac, for instance, there are 2,400 hearths to protect an area of about 750 acres. In 1911 at that spot there were only two alarms; the expense incurred amounted in all to 8 francs per hectare, which is about 2s. 8d. per acre. In Alsace, where frosts are more frequent, and a rather different method is in use, the cost has been found to amount to only 10 centimes (1d.) per hearth an hour of keeping fires alight. The "hearths" there employed are movable, and are rolled into position so as to command a space of 1,000 metres square each. The treatment is said to be effective. In 1899, it is reported, the gardens and vineyards surrounding Colmar were securely protected from a frost of 8 degrees Centigrade (16° F.). The fuel used is coal tar, which of course gives forth abundant smoke.

The two last mentioned cases are perhaps quite as much cases of common use of implements as of common work, and so lead up naturally to a form of Co-operation which supplies a far more fruitful theme for consideration among ourselves, although very many words need not be spent upon it, inasmuch as it speaks for itself.

From the early days of the *fruitières*, when cheese-making plant was bought in common to serve contributing members in turn, common ownership of machinery and implements too costly for any one small farmer to acquire for himself has been much practised abroad. In Germany

there are at the present time, in one Union only, 250 societies of this sort, to compare with a mere handful among ourselves.

What strikes the eye most among these common machinery employment societies are the threshing machines still most commonly moved by steam, but in some cases already by electric power, which have been threshing small farmers' corn, here, there, and everywhere, for a long time back, in France as well as in Germany. The late Count de la Bouillerie made the formation of co-operative threshing societies his speciality in France. In Germany, among the Raiffeisen societies—which are co-operative societies for all manner of other purposes, as well as for credit—you may see such machines, with engines, which have been bought with the society's credit and paid for out of their own hire at so much an hour to members, and a little more to non-members.

But there is machinery and there are implements of all sorts, much less pretentious, down to the subsoiler and—in Bohemia I found this—stubbing implements for stubbing up roots of trees in newly reclaimed land—more particularly also drills, manure distributors, reapers, mowers, corn screens and winnowers, rollers, clodcrushers and the like. Co-operative weighing machines are very common. The variety of implements and apparatuses so secured has indeed come to be very great.

Of late the erst promising future of steam threshing has suffered an eclipse by the advent of electricity, which seems to be carrying all before it. It is superseding steam in this application as in all others. Another reason—applying abroad—for the eclipse spoken of is that men letting out steam threshing machines have under the effect of co-operative competition come down so materially with their prices as to leave practically no ground for keeping co-operative machines going. This has told

against co-operative societies more especially where, as has not unfrequently happened, their organisers had not taken adequate care to make sure in advance of sufficient custom to keep the machinery steadily employed. No doubt the single owner carrying on the business as his own venture is under many conditions in a more favourable position for protecting himself than a society. We may require threshing machines for our small holders' settlements. For the flail, the cadenced fall of which may still be frequently heard abroad, has long since gone out of fashion among ourselves. But even for them it may be assumed that electricity will serve preferably as motor.

The apprehension so generally given expression to at the outset with regard to common employment of machinery, on the ground that simultaneous demand might render its benefits illusory, has, generally speaking, turned out a mere bogie. There is as a rule some little latitude left and small men know how to arrange among themselves. So much is this the case that even in a quite novel departure ventured upon by an English society, the Stotfold Small Holdings Society—which has purchased horses as its common property, with implements to match, for the use of thirty-nine occupying members, and occupying 141 acres in holdings, none of which would warrant the keeping of horses for itself—there has been no difficulty whatever about allotting the use of the teams in turns. The charge made for ploughing is there 12s. an acre, for drilling 5s., for cultivating 4s., and so on. And the use of the horses has left a profit. There has been no loss made by members failing to pay. And although there was no compulsion to employ the society's horses, their employment has been steady.

In respect of the more costly machinery, the use of which is in great demand during certain brief seasons, particular arrangements are made to provide for each

member having his fair turn. Thus in the use of threshing machines the several "turns" are settled either by lot or by amicable arrangement, on the understanding that at the time of the great rush, after harvest, the machine is to be let out only for a very limited time, members to be served later on in the same order—unless they voluntarily modify it—when the rush is over.

In respect of steam or motor ploughs a rather more elaborate arrangement prevails. Members are required to give notice by a certain date of the extent of land that they propose to have ploughed—thus, say, if the employment is to be the breaking up of cloverley, by 1st May, otherwise by 1st July, particulars to be given at the time as to whether it is to be for ploughing up stubble or furrowing for autumn corn, or else for spring corn or roots. To each particular operation a certain limited time is allotted, so as not to wrong the members succeeding in the order fixed for the season, whether it be by ballot or by amicable arrangement, or by a mixture of the two, such as is sometimes resorted to, so as to give the later customer of one season the chance of becoming an early one in the next. To the substance of his notice every member is bound. He will have to get a certain acreage of land ploughed or else pay for it.

In the purchase and employment of implements, or whatever be the *instrumenta muta*—or, as in the case of Stotfold, the *instrumenta semivogalia*—employed, co-operative societies will do well to bear in mind that, although such articles may perfectly well be purchased with the use of credit—we have had instances of this also in this country, for instance, at Muskham, in Nottinghamshire, where a reaper was bought with money borrowed from a bank and paid off out of the receipts—it is essential that this should be done only in cases in which there is a certain prospect of the machinery repaying itself out of its own

use in comparatively little time. And provision should be made for its doing so. For you cannot give such appliances a long life. Use is likely to wear them more rapidly than in a single person's possession. New inventions may come in. And there is always the chapter of accidents to reckon with. The society should place itself upon the safe side. Small farmers are not as a rule particularly flush of cash; and accordingly resort to credit, such as has been instanced in the case of Raiffeisen societies—which are in an exceptionally favourable position for the purpose—is frequently suggested. However, credit is not the only, nor perhaps the ideal way of providing the first funds. Members will do well to raise at any rate a certain proportion of the capital required among themselves. There may be difficulty in this. Nevertheless an effort will have to be made. In some cases it is held that there should be some proportionality in the contributions to share capital. In such the number or value of shares to be taken up is apportioned either to the acreage occupied or else to the amount of work to be done. When it comes to motor cars, of which we shall still have to speak, the outlay is often distributed among members according to the weight of goods that they undertake to have carried.

In prudence a society will have to ascertain beforehand whether there is likely to be sufficient demand for the article to be acquired. Employment of such need not necessarily be limited to members—although members must, if there be competing demand, in any case be assured precedence. However, employment by outsiders may very well be called in to help to pay for the machinery. But they ought to be charged at a higher rate than members. Economy may be furthermore practised—as often enough it is on the Continent—by utilising the power employed for the principal machine for the moving of others. Corn cleaning appliances are often attached to

threshing machines, or chaff cutters, grist mills, circular saws, and other appliances, and of course harrows, cultivators and rollers to power ploughs. It need not surely be specially urged that proper care should be taken of the article and, if it be a machine, it ought not to be entrusted to other hands than those of the society's machinist, whereas smaller implements want to be examined after use.

The employment of the machinery and implements here referred to will not only enable small farmers to carry out their agricultural work better than they could do otherwise, so as to yield them better material results, but, by economising labour, also to occupy more land than they could otherwise take charge of.

Co-operative steam ploughing, neglected in this country, is freely practised both in Germany and in France and has in general given satisfaction. (I have never come across the co-operative employment of a power digger.) In Germany there are at present about forty steam or motor ploughing societies at work, enabling even occupiers of comparatively small farms to benefit by the improved and cheaper work of the power plough, as compared with the team plough. A set of steam plough tackle is considered not to be economically applicable upon an area of less than 2,050 acres. The employment of such ploughs is unfortunately further limited to level land only, or land with only a slight gradient. But on strong land the absence of pressure from the tread of the teams, coupled with the greater evenness of the work produced, are appreciated as advantages. The value of shares in a society as a matter of fact varies as much as between 50 and 2,500 marks (or shillings). Where shares are smallest members' holdings in them are most nicely proportioned to the size of their farms, down to reckoning by the very hectare (about $2\frac{1}{2}$ acres). Members are as

a rule called upon to provide the necessary labour and fuel, to bring up the water required and to move the machine one way or another with their teams. However, there is in this respect no rule of universal application. Care is always taken to keep a good machinist in charge of the machine who, in addition to his fixed salary, is often enough allowed a commission per acre ploughed. To avoid unnecessary breakages members are called upon to remove any big stones which may be unearthed in the course of ploughing, before the time for the next ploughing comes round. The rates charged for ploughing vary according to soil, depth and neighbourhood. There are different rates charged for shallow and for deep ploughing, for ploughing four, or six or seven furrows at a time, and ploughing deeper than 10 inches or so is generally forbidden for four-share ploughs. Some societies also vary the price according to the season, charging less during slack periods. There are likewise distinct tariffs for harrowing, cultivating and rolling. Some associations have a rather substantial capital invested in buildings for housing the machinery when idle.

In France the steam ploughing movement is only in its infancy, but so far as it has advanced it has given satisfaction. Among the ploughing associations formed is one at Soissons, which was constituted only in May, 1910, by ten members—nine of whom are farmers, occupying among them about 5,500 acres of land—with a share capital of 100,000 francs (£4,000). The plant secured consists of two 80-horse-power Fowler engines, 650 metres of cable, one four-share and one six-share plough, a harrow, a cultivator, a roller, and the necessary watercarts. The acreage ploughed within the first five months was 1,125 acres, at the rate of about $10\frac{1}{2}$ acres a day. There are six men attached to the plough. The work is, as in Germany, divided into three periods—stubbleing, early

ploughing and late ploughing—so as to give every member his turn at each. The hirer of the plough provides the fuel and carries the water. So satisfactory were the results considered to be that ten more members joined in 1911, providing another 100,000 francs share capital for a second tackle. Last September (1911) another society was formed on the same lines at Plessis-Belleville in the Oise. Occupation of at least 62½ acres of land and subscription of the requisite share of the collective capital entitle to membership. The rate fixed for ploughing varies, according to depth, from 24 to 28 and 32 francs per acre. The charges for harrowing and rolling are only nominal.

One specific employment of machinery in common which has already met with particular favour in this country is that of grist milling—not by members using a common grist mill or corn crusher in turns, but by the society setting up and working a grist mill, from which members can obtain the grist required at, of course, a lower price for the grinding than they would have to pay to a grist miller grinding as his own venture. The popularity of such milling in this country is in great part attributable to the increased keeping of pigs for fattening. The mills so set up will crush any species of corn, including maize. So satisfied are members with the results obtained that there is already talk of flour milling being taken up. So long as that is practised on distributive lines—such as grist milling really is—it is likely to give satisfaction, wherever there is sufficient demand. Co-operative baking in the same way—among agriculturists—remains for the present still confined to foreign countries.

The use of Co-operation has also been impressed for collective forwarding of goods—and it may likewise be of passengers—by motor cars. One may certainly wish the experiments in progress to be crowned with success. For, notwithstanding the wide extension of our network

of railways—supplemented, it may be, here and there by “light railways”—the want of cheap and convenient means of transport to connect rural parishes with railway stations has been greatly felt. Goods have to be carted or carried, in some instances over long distances. That means expense and trouble, more particularly since such goods can under ordinary circumstances be only to a very trifling degree bulked, for economy. To remedy this state of things by the employment of motor cars seems at first sight an easy process. But it is by no means as easy as it looks. There is some difficulty in organising the service, and also in ensuring sufficient, and sufficiently steady, support. In Germany agricultural motor societies have experienced considerable difficulty in making both ends meet, even though in some instances an entire district has been made tributary, various localities being called upon to contribute to the share capital. They would not have arrived even at this moderate measure of success, had there not been an agreement, more generous than businesslike, with the Post Office (for carrying parcels) or grants from some humane authority or other. The result during the first year or two, or even three or four years, has generally been a loss.

The credit of having first introduced motor car service into this country belongs to Mr. C. J. Fairfax Cholmely, of Brandsby in Yorkshire. His society (at Brandsby) employs two motor waggons travelling between Brandsby and Easingwold railway station. (It used to be Tollerton railway station, rather a longer distance, of $11\frac{1}{2}$ miles.) The success obtained, in spite of some difficulties, is in a great measure due to the friendly co-operation given by the North Eastern Railway Company. (In the Teme Valley the Great Western Railway Company has met a similar scheme in the same helping way.) The society has provided the depot and organises the traffic as the

Railway company's agent, accepting also outsiders' goods for forwarding, to produce bulk. It began service in October, 1904, and since the substitution of Easingwold for Tollerton, in 1906, runs its two motors twice a day. The Teme Valley scheme has been less successful, but may prove useful as a suggestive pioneer. Similar services have been set on foot between Gloucester and Malvern (with a passenger service), Caenby Corner and Lincoln (or Grantham), and at Otterburn. The lastnamed service had to be abandoned on account of the mountainous character of the country. Thus far the Brandsby service appears to have proved the most successful, which may be due to good management.

The facilities recently conceded by the Postmaster-General for rural telephonic service create a fresh tempting opportunity for co-operative action, which one may hope will be taken advantage of. Farmers in this country, who have long been accustomed to faking entirely for themselves, may not at once discern the great business value of telephonic communication. However, those who have once learnt its use—as shown in Denmark and to a still greater extent in the United States—are not likely to belittle its benefits. It places, so to put it, the farmer in the midst of Mark Lane or the Meat Market, and brings him into touch with all from whom he may want to buy or to whom he may desire to sell. The responses thus far made to the Agricultural Organisation Society, which is vigorously bestirring itself to induce farmers to combine for common telephone service, and has obtained from the Postmaster General a promise of favourable consideration for co-operative telephone schemes, holds out a fair prospect of the telephone soon becoming as freely used in the service of Agriculture in England as it is in America.

However, the palm of importance under our present point of view is unquestionably due to the co-operative

employment of electric power—and, it may be, as a corollary, electric lighting—of which British Agricultural Co-operation as yet knows nothing. We may employ water—even, it may be, steam, although I know of no such cases. In Bewdley, in Worcestershire, indeed, water has been co-operatively laid on, temporarily at any rate, and it is co-operatively employed for sheep dipping. Germany, on the other hand, possessed on 1st April, 1911, as many as 2,700 electric supply works in connection with Agriculture, supplying at least 11,000 parishes with power or light, and 698 new works were then in process of construction. Of the collective number 510 were co-operative. The roll has since been lengthened and is in fact being added to every week. For there is a general call for electric power, since its advantages have come to be appreciated. In Herr Rabe's words, used at a recent congress, the "electric bacillus" is at work.

The matter is indeed not all advantage. There are serious difficulties to be confronted, which will in every case have to be met by forethought and careful preparation of the ground. The two main difficulties are these: that the demand for power (or light) is likely to be very much smaller in agricultural districts than in industrial, composed of very limited individual requirements scattered over a rather wide area; and that what little electricity is wanted will all be wanted at the same time—and that a comparatively brief time.

We old men remember what a progress it was considered to be when steam was introduced as a handmaid to Agriculture, to thresh our crops and later to plough our fields. However, by the side of electric power, developed as it now is—and with further useful developments in near prospect—steam can appear only as a bungler. It takes up space; it cannot be worked except by skilled and trained attendants, and is exacting in the ancillary

services of water and fuel supply. It takes a long time being got ready for action and some time once more to get back to rest ; it is charged with dangers of various sorts ; it is cumbersome and difficult to move ; its service is not readily adaptable for moving those smaller implements which are so largely in request in the present day as economising hand labour ; it requires shafts and belting, which are apt to get into the way ; it must mean waste, because you cannot stop it suddenly, nor apportion the power used precisely to the particular employment ; a ten horse-power engine will mean expenditure of ten horse steam power, even though the job require only two.

Electric power presents none of these difficulties. It is easy to move, easy to work, easy to clean. For its lighter employment you may have a small motor, such as a man and a boy may carry easily on a hand-barrow or shove along on a wheelbarrow. A two horse motor weighs under two hundredweight. An electric motor takes up little space and may be fixed up anywhere, down on the floor—without any special foundation—or against the wall or up against the ceiling, screwed to one of the joists. In the Pomeranian “ cornhouse ” a ten horse motor stands fixed under the stairs, altogether out of the way. An electric motor is easily worked, by an old man or a sharp boy. There is no skilled labour required. It scarcely ever calls for repairs. There is no waste of power in its employment or waste of time. Apply a ten horse power engine to a one horse power job, it will expend only one horse power, and that is all you will have to pay for. Turn off the current and there is no expenditure whatever. It ploughs better and it threshes better and more economically ; it does everything better than steam, because its movement is thoroughly even. German farmers have found that that means money for them ; for electric power-threshed corn fetches more than steam

threshed. Wherever electric power has acclimatised itself the old-fashioned horsegear has been cast aside. And an electric motor is always ready to work at once. Even an electric threshing apparatus may be got ready for work in two hours, which is an important consideration in rainy summers. There is no danger of fire in it. No more is there loss of power by transmission. For you can move your motor, if it is portable, right up to its work—up to the chaffcutter, or the liquid manure pump, or the cake mill, the corn screen, or the grist mill. It is such handiness of the motor which makes its service so highly appreciated. You can move it anywhere—up to the cornloft—where among other things it has been found most useful for air-drying damp corn—or out into the garden. And, like the steam hammer—which we used to hear of with wonder fifty years ago—it will do “anything,” from breaking up oilcake to lifting a whole load of hay or corn out of a waggon up to the loft. And wherever there is enough work for it to do, and circumstances are not altogether adverse, you will find it cheaper than steam as well. There is not a farmer who has employed electric power on his farm who would care to give it up, even though—as happens in some cases, where its use has been resorted to rather for the sake of convenience than of economy—it still cost him more than it should. There is a perfect consensus of feeling on this point.

Under such circumstances it cannot be held surprising that—abroad at any rate—the problem how to fender electric power serviceable to Agriculture, has occupied agricultural minds for a long time back—something like nearly twenty years. Eagerness to discover means for following in Industry's wake was in Germany, which has unquestionably taken the lead in this matter, not a little whetted by the daily increasing scarcity of farm labour, which had become the standing crux of German Agricul-

ture, affecting, as it happens, more particularly the medium peasantry. For, although a larger land owner might without serious difficulty engage a gang of twenty or thirty, or else fifty or sixty "harvesters"—as we should call them—from "Waterpoland" or Russia, on his property, the peasant (or yeoman), who requires only two, would have little chance of providing himself from the same quarter. For these gentlemen are of gregarious habits.

Unfortunately, the problem was found to present serious difficulties, more particularly in the early days here spoken of. Wherever there was a supply of electric power readily available, by reason of the proximity of industrial establishments capable of supplying such, large landowners, who could afford the expense, were found here and there willing to take advantage of the opportunity—and did not regret it. However, such cases were rare. And they left the small farmer altogether out in the cold. The main difficulty was that of transmission over wide distances.

The matter assumed an altogether different aspect when high tension oscillating or polyphase current was brought into use, which admits of the transmission of electric current over 60 or 100 miles without any perceptible loss of power. The opportunity to enlist agricultural custom seemed to some supply works too good to be neglected. Some enterprising supply companies at once laid themselves out for cultivating the new clientèle also, by transmitting current at any rate to rather populous rural districts. Thus the Electric Tramway Company of Hanover carried its service out into the surrounding country to supply no fewer than 108 rural parishes.

However, once more, such cases proved rare. Rural populations cannot help being sparse, and their demand is only comparatively moderate—and intermittent to boot. There are farmers situated so near to industrial supply

works that their service could be readily tacked on to the industrial. And, under the growing desire to employ electric power and light, such opportunities were gladly made use of. There is no Co-operation in this, because none is required. Arrangements of this kind are common in industrially highly developed districts such as parts of the Kingdom of Saxony and of Rhineland. Surely there must be not a few districts also in this country in which they would be practicable.

But the fact had to be faced that the general requirements of Agriculture are not to be satisfied in this way. Electric supply companies could not be expected to provide separately for what was required in Agriculture for the two reasons already stated, namely, sparseness of population and irregularity of demand. Demand comes in with a vehement impetus when there is corn to be threshed. During all the rest of the year it is at present small, but nevertheless exacting enough to require supply to be kept open. Things are rather better where there is an industrial undertaking joined on to the farm, as happens frequently enough in Germany, where there are agricultural distilleries, mills, brown-coal mines and the like.

The only solution of the difficulty of course was found to be by Co-operation. There must be combination among consumers, and—this is even more important—there must be identity of interest established in the main—it need not be absolute—between consumers and producers. The difficulty about money, which of course arose, would justify the bringing in of non-consuming shareholders. But consumption without a share in the production there could not be, otherwise than in quite exceptional cases, where there is no other means of producing "bulk." Only in such way were the interests of production and consumption, which under the peculiar conditions of the case at first sight seem so irreconcilable,

to be brought into unison. It does not follow from this that the legal form taken by the combination must necessarily be that of a co-operative society, so long as the essentials of Co-operation are observed.

Of course mistakes were made—and had to be paid for. Between 1901 and 1911 no fewer than thirty-eight electric supply societies came to grief. That means a good deal in the early stages. For societies at first formed only slowly, at the rate of one, two, three a year. It was only in 1908 that they began to multiply fast. As is quite usual in co-operative productive enterprises, people began with too little money—which proved all the more serious a mistake as loan capital was then difficult to obtain. Co-operative Central Banks wisely made it a rule to abstain rigorously from such business which, in addition to involving risk, would have locked up money for an indefinite time. And Joint Stock Banks for the same reason looked askance at the security offered. The public Savings Banks—which in Germany, unlike our own, make a point of investing what money they can (at a higher rate of interest) in fructifying outlay—refused to make advances except to societies based upon unlimited liability. But electricity societies, although willing enough to make the liability of members, according to German custom, tenfold and more of the value of the shares, shrank from giving the unlimited security asked for. In the next place societies at first failed, accountably enough, to make sure of adequate and dependable custom. At members' request wires were laid to farms a mile or two distant from anywhere else, at a cost out of proportion to the return. In the third place districts to be served were made too small. There were reasons for this. In some parts of Germany—for instance in Hanover, which is a very active district in this as in other respects, having now 121 electric supply societies within it, and where old independent "Saxon"

habits survive—people prefer having a small concern of their “very own” to throwing in their lot with hundreds or it may be thousands of comrades. And, above all things, the agents of electrical engineering companies, being keen upon business and not in the least concerned about subsequent commercial success, canvassed for orders for small plants with thoroughly German persistency, confirming their victims’ preference for small concerns. There was at that time a serious lack of independent expert advice, and as a matter of course technical canons were much sinned against. This lastnamed fault has been very effectively remedied by the organisation of distinct technical departments, with highly capable men at their head, on the part of Co-operative Unions, which alone, of course, are capable of undertaking the work of advice and supervision. The Prussian Province of Saxony, more in particular, has distinguished itself by paying particular attention to this matter and securing a most capable expert adviser in the person of Herr Vietze. The result is already observable in the success of the movement generally in that district, half of which is either already provided or else being provided with electric power, and in which eighteen main central stations were set up in as many months. There are, no doubt, some small electric concerns which answer very well. However, generally speaking, it is found that larger societies, with districts extending over areas with a radius of twenty, thirty, or forty miles, are the most economical and the most successful. Such societies provide a broad foundation to work upon and are sure to combine within them a variety of interests, aiding and supplementing one another and so to some extent correcting the irregularity and intermittency inseparable from agricultural custom—Industry putting in its claim where Agriculture fails and lighting supplementing the demand for power. Their membership also is necessarily considerable, going up to

three thousand and more. That means "bulk." An analysis of such membership shows, among other things—this point ought to be interesting from our point of view—that the demand for electric power by no means comes solely, or even mainly, from owners or occupiers of large farms. There are many such. But it is the small men who make up the main demand—small men down to such petty peasants as, in French societies, combine, not merely to purchase electric power in common, but even to keep their own little one or two horse power electric motor in common, since one holding does not afford sufficient employment for it. At Massow, in Pomerania, of the 32,000 or so acres for which the society caters, about 28,000 acres are occupied by peasantry. In the Birnbaum Society, in the Province of Posen, there are 118 five horse power motors distributed over fourteen parishes. Five horse power motors do not indicate large properties. In the Prussian Province of Saxony, Herr Rabe, chairman of the provincial Co-operative Union (which embraces also some adjoining small independent duchies), has designated the peasantry as "the main support of the electric power undertaking." These men find substantial advantage in using electric power—and light in addition, as a convenience—on account of its cheapness and its rendering them independent. Among the largest societies there is the pioneer one at Lottin, which has customers more than sixteen miles from its central power station, and which, with the help of its 300 horse power water power and 180 horse power steam engines, supplies 102 customers, employing among them 150 electromotors, with 1,115 horse power of power and light for 5,000 incandescent lamps. The total area served covers 26,000 acres, and the entire length of cable employed is 85 miles. There are twenty transformer stations, to convert the high tension current into low, for use as

driving force. The Besswitz society caters for a district of 50,000 acres, extending twenty-two miles from the electric power station, having a cable length of 138 miles and supplying 180 motors and 5,000 lamps. The Birnbaum society covers an area of over 100,000 acres, comprising five small towns, by means of cables 200 miles long. On the other hand, there are societies for one parish only. The Province of Saxony, which may be considered the most advanced in this matter, favours fairly large districts. Hanover, on the other hand, is altogether in favour of small. However, it secures the effect of largeness by keeping these small societies combined in large federations, which act as wholesale purveyors of current.

The organisation of small societies is generally influenced by a perfectly natural desire to turn local water power to account. Generally speaking, water power is the cheapest generator of electricity. And accordingly people are already providently taking stock of what water power there is and making sure of it as a means of forestalling capitalist engrossers. With such an object in view the Central Co-operative Agricultural Society of Pomerania is having a register prepared of all water power in the province. However, water power is not in every case to be depended upon. It may prove insufficient. It may run dry. And above all things it may require a heavy preliminary outlay to make it employable. But then it is not by any means the only generator coming into account. Steam is employed in places with distinct advantage.

In course of time people learnt how to organise. They learnt to take stock of the consuming power present in every district and to be careful to form societies only where there was plenty, with a prospect of increase. They learnt furthermore to make sure of what custom they wanted by requiring intending consumers to bind them-

selves for a long time in advance—in some cases up to fifteen years—not merely as an incident to membership, but by enforceable contract as individual customers. One large society in Pomerania—which province has, under the vigorous incitement of Herr von Hertzberg-Lottin, taken the lead in the movement—obliged members to guarantee a consumption of at least eight kilowatt hours (that is, Board of Trade units) per acre (five kilowatt hours to the Prussian morgen). To prevent members fixing the minimum too low, some societies charge a higher price for what is not guaranteed.

Next, organisers are now careful to make sure of the presence of sufficient share capital. People are generally overfond nowadays of embarking in enterprises on credit. The mistake of this has been very distinctly found out in electrical undertakings. The leaders of the movement have accordingly laid it down as a standing rule that at the very least 25 per cent. of the capital required should be provided by share capital. The consideration for adequate funds, coupled with a provident regard for sufficient and regular consumption, has in course of time led to the development of the movement in some cases on other than co-operative lines, making a public service of electric supply. There is no occasion to explain at length that, as in credit, great advantage has been discovered to lie in the commingling of various consuming interests in the same venture, enlisting on the one hand public service and on the other industrial enterprise in the same undertaking as agricultural, so as not only to increase bulk, but at the same time also to equalise demand by making one class of demand to dovetail into the other. At a little station on the Prussian railway line which carries passengers from the Hoek inland an instance of this was to be seen as long as something like twenty years ago, the electric power required for a co-operative dairy

set up by immigrants from the Palatinate being employed at night for lighting the station. Where a large district is served there are sure to be small towns dotted about it, too small or unenterprising, it may be, to embark upon providing their own electric light, but perfectly willing to join in a larger undertaking. The district supplied by the society of Lottin, in Pomerania, comprises two towns; that of Birnbaum, in Posen, five. Then there are railway stations and other public establishments to be supplied with light; also industrial establishments scattered over the area—and where they are not yet, they may be set up, once electric power is provided. This point should possess interest for us in view of our growing-up Garden Cities with their factories. Wherever large districts have been adopted it has been sought to enlist the support of such various institutions. And to be able to do so the more effectually, and also to provide sufficient funds, the assistance of public authorities has been applied for and obtained. Thus in Pomerania—which has gone the fastest ahead in this matter—the Province supplies one-third of the capital—it has actually voted £425,000—on condition of the “Circles,” that is the smaller administrative districts, contributing another third, and the Society, which at its central power station becomes a contractor for power, foregoing any profit whatever upon such supply. The service is to be self-supporting and nothing more, paying a moderate interest on capital but nothing beyond.

Such assistance by public bodies is supposed to help, in some manner in overcoming two obstacles which, by its very character, purely co-operative organisation appears unavoidably to oppose to electric supply. One of these is the unchallengeable “one man, one vote”—independently of the difference in holdings in shares—and the other the danger arising from the right which every member possesses to withdraw from the society.

taking his shares with him. That is one reason why the promise to take a certain supply is enforced by contract, and not merely as an incident to membership. The German law, as it happens, permits societies to mitigate such danger further by extending the term for notice of withdrawal to two years, after which members remain liable for another two years, with the proviso added that, should the society be wound up within six months after a member's retirement, such retirement shall become void. The "one man, one vote" is not so easily got rid of. It is inconvenient in a great capitalist enterprise with very unequal stakes—such as are in any case unavoidable and appear specially called for in some societies by the provision laid down that members shall take up shares in exact proportion to their acreage—at the rate, to quote one instance, of 1s. 7d. per acre occupied. That is bound to bring about a striking inequality of pecuniary interest embarked. The large number of various interests enrolled and the supervision exercised by the authorities—which have a stake in the concern and which as a matter of course impose their own conditions securing to them an effective say—to a great extent eliminate the danger of ochlocratic unsteadiness. But, although pecuniary help from public authorities is freely asked for—in France it is sought to make the *Crédit Agricole* available for the purpose—the majority of electric supply societies continue genuinely co-operative.

The necessity of having good expert guidance is now generally understood and provided for as well as circumstances permit.

There is a difference of opinion as to the most desirable value of shares. *Prima facie* large shares appear by far the most desirable. However, the object of the societies avowedly is to provide for small men, who are in many districts in a considerable majority, and from whom a

large contribution in share money could not be looked for. It has accordingly been recognised that there must be diversity. Shares now vary as much as between £25—in one exceptional case even £40—and £1 or £2.

There is a difference of opinion also upon another point of elementary importance, namely, whether a co-operative society should manufacture its own electric current or take it on from others. The original idea was to do everything for oneself. There was, as a rule, the water power; why should it run to waste? The large Pomeranian societies, as already observed, manufacture their own current with the help of powerful machinery and are quite satisfied with the result. So is the society of Neuve Maison (Aisne) in France, working on a smaller scale since 1905. However, a power station necessarily means additional capital—where capital is not overplentiful: from 25 to 30 per cent. of the entire outlay. And it means also a considerable responsibility and a large staff of employees to superintend. Accordingly the dominating idea now is—most distinctly insisted upon in the Province of Saxony, and formally endorsed by a recent Congress of Electrical Engineers assembled at Brunswick—that the generation of power should be left to capitalist enterprise and that societies should be content to take their power from capitalist bodies, under peculiar safeguards, which are held to recommend themselves. Thus supply companies with which a contract is entered into are called upon to bind themselves not to raise the price of power or light (the rate for light is twice that for power) for a term of, say, thirty years, but to reduce it whenever it can be shown that by reason of new inventions or other favourable changes production has become cheapened. To decide upon the latter point in cases of disagreement, provision is made for the nomination of a board of arbitration, the composition of which is particularly

laid down in the contract. In the majority of districts people go further still, and object to co-operative societies even undertaking the maintenance of the central supply stations, which act as wholesale distributors of power received from the generating station. From the main central station the current is distributed over the district served by means of wires leading to the local stations, where transformers are at work, to convert the current for practical use from high tension into low. However, the leaders of the movement in Prussian Saxony, who certainly speak with authority, strongly maintain the preferableness of keeping the main central station in the hands of the society, which course has in their own case answered thoroughly well.

On these lines the co-operative use of electric power and light has spread out over Germany with astonishing rapidity. The movement began only in 1897. Until 1905 societies formed by one or two in a year. In 1905 there were three formed, then seven, then twenty. At the present time, as observed, there are, among a total number of 2,700 electrical supply institutions, with 698 recruits preparing for service, not fewer than 510 co-operative.

The result is generally considered entirely satisfactory. Of course, wherever there has been mismanagement, where adequate consumption has not been provided for, nor a sufficiency of working funds, matters were bound to miscarry. But wherever due regard has been paid to business principles the result is good. There is greater convenience. There is greater cheapness. And there is better work. Electricity has been found cheaper not only than steam, but also than benzol. The saving on threshing is put at 2½d. per German hundredweight, which corresponds to 110.231 lbs. avoirdupois. The corn threshed under its even movement is said to fetch from 3 to 5 per

cent. more than corn threshed by steam, from 8 to 10 per cent. more than corn threshed by horsegear, and from 18 to 20 per cent. more than corn threshed with a flail. Deep ploughing, so it is contended, could not be carried out with anything like the same even thoroughness without the use of electric power, let alone that the motor will pass where the steam engine could not, by reason of its weight, and that electric power is applicable as motor on inclines too steep for steam to work upon. There are some hitches still about supply and distribution. But these, so it is hoped, will be removed, once the proposed mutual relations among societies come to be established, which are to permit societies with excess of power to pass on such to others which are in want of it. And one great gain achieved is that the trouble of undersupply of labour has been satisfactorily brought to an end. Electric power has taken the place of hands missing. It has also rendered such farm work as must still be supplied by hand more acceptable to those employed. Men and maids no longer refuse to undertake it on the score of its severity, because the hard work is now done by the machine, which they simply set in motion. There is, of course, great variety in the machinery used. On large farms it is usual to employ two motors—it may be more still—a large one, of 18, 20, or 25 horse power, for threshing, ploughing, and the like; and a small one, of 2 or 5 horse power, down to even one, for chaff cutting, liquid manure pumping, breaking cake, and so on. A one horse motor is not unfrequently used to pump up water for irrigation. On small holdings there can be only one motor; but that is valued as a boon. It makes the smallholder's own work go farther and enables him to do things which without it he could not have attempted.

One would think that in this country, so familiar with machinery, the original leader of the world in matters

of mechanical power and its application, there ought to be room for the employment of the power which our neighbours in Germany have found to constitute such a valuable acquisition for Agriculture. And such employment cannot present any insuperable difficulties. We have excellent electrical engineers, excellent engineering works ready to supply what is wanted, quite apart from the great German firms, more experienced thus far in this particular branch of work—like Siemens-Schuckert and the Allgemeine Elektrizitätsgesellschaft—which are only too willing to supply our market and whose illustrated handbooks afford a mass of useful information upon the subject. It is time, at any rate, that the matter were studied. And one may hope that our backwardness will not long continue.

XIV.—CO-OPERATION IN THE TENURE OF LAND.

Collective cultivation of land—which is a different thing altogether from collective occupation—has become pretty well a practice of the past. It will not bear the strain of severe modern day conditions. *De bien commun on ne fait pas monceau*. But it has gone to rest only to see collectivism either in the tenure or else in the acquisition of land rise up far more promisingly in its place.

We are, in this country, at the present moment concerned practically only with the first of these two forms of occupation. And to that form accordingly must in the main present observations be restricted—although an occasional passing glance will necessarily have to be cast at the other. Its rising into prominence may be taken to be now only a question of time. Mrs. Rowland Wilkins herself, though an out and out champion of tenant holdings, admits in her evidence given before the Small Holdings Committee, that “the best kind of man, the strongest and most vigorous kind of man, would aim at a freehold” (7954), and “You will always get a class of men who think the freehold is the best thing to aim at” (7953). So far as our present consideration extends, the principles, which govern the one form of occupation may be held to govern also the other.

For the present moment, however, the port towards which alone we in this country are deliberately steering is the creation of a host of small *tenant* holdings, by means of which we hope to make our agricultural land once more “the land of the people,” and to provide rural homes for

our overflowing population. And those who take part in the organisation of such movement very accountably suffer themselves to be led in the main, for practical purposes, by the precepts of our last Act, of 1908. Our efforts are bent upon taking advantage of its technical provisions and the powers which it confers. That one Act cannot, however, possibly determine national land policy for all time. It marks a material advance on the road to the democratisation of Land and of Agriculture on which we find ourselves walking, and for the moment it appears to meet the requirements felt by people interested. However, it can as little bound the movement as did that well-meant but abortive Act of Mr. Chaplin's of 1892.

An inscription on the walls of Neu Breisach says :

Limes eram Gallis, nunc pons et janua fio.

A similar evolution may be predicted for our policy of land settlement. The very flaws now detected in its machinery, when put into practice—and they are very apparent—proclaim that there must be more ground passed over, that the “bound” must become, as in the above line, a “bridge and gateway” for further advance.

That circumstance in itself will make it desirable that a broader view of the question should be here taken than the very practical, but still narrow, one of what can be accomplished under the Act as it stands. Acts of Parliament are, after all, only the outward garb given to popular demands which claim acceptance, not because they are permitted by an Act or otherwise, but because they are good and useful in themselves and therefore entitled to call for new legislation.

Among the flaws so detected, as has been indicated, the most apparent are to be found in the machinery, the handling of which is committed to the County Councils, which have not, generally speaking—there are exceptions

—thus far shown themselves markedly sympathetic to the new movement, being themselves supervised by a public Department in London, whose officers are guided by red tape regulations. Six additional Small Holdings Commissioners have recently been appointed to do the necessary prodding. The dissatisfaction caused by earlier inaction called imperatively for some remedy. Nevertheless, in principle the machinery with its inherent defects remains still the same. The County Council continues to be the administering authority. And it is destined to continue so to the end of the chapter. We do not get rid of it after a completed transaction. The land being granted on lease, or by agreement, is doomed to remain tenant land under the County Council, of the future composition of which no trustworthy forecast can be formed. There can be no fixity of tenure. The tenancy comes to an end. In the case of Mere, in Wiltshire—which is quoted by the Board of Agriculture itself as a sort of model instance—the collective lease runs for twenty-one years, with an option to extend it to thirty. In other cases the lease expires at the end of fourteen years. That is not fixity of tenure. Our men are indeed likely, as tenants, to wish to retain their power of free movement. But very few of them are likely to desire to be compelled at a given time to move elsewhere, or else to submit to new terms, under which their own outlay and improvements may conceivably be charged against them. It is idle to object that the County Council of thirty years hence will be glad to renew on the old terms. It may be so, and it may not. And public opinion on the matter may change. A man who puts thirty years' labour into a parcel of land is entitled to ask for better security than mere conjecture. And then there is the question of buildings. We have been fortunate thus far in having to deal in the main with areas only which required no new

buildings, because all the new tenants were denizens already of the particular parish and had homes of their own, or else the existing buildings could be so appropriated as—readily or at a pinch—to suffice for their new purposes. But that is not likely to happen in every case. And when we talk of “Repeopling the Land,” and “Bringing People back to the Land,” it is to be presumed that we are thinking also of setting up new homesteads, as well as of simply giving more to him that hath already. And that will require new buildings. We possess a considerable variety of arrangements for simply “housing” purposes. But none of them yet apply to “settling.” To speak of one of them, the main reason accounting for the signal success of Mr. Vivian’s “Tenant Co-operators” housing scheme is that it gets rid of landlordship, that in a reasonable, democratic way it creates ownership vested, not in a County Council, but collectively in the society of tenants themselves, who thus become in a sense their own landlords, and thereby obtain fixity of tenure and an assurance of fair rents. Under a determinable lease the question of buildings is a difficult one to deal with. Fourteen or thirty years’ occupation cannot fairly repay the cost of erection by the tenant himself. And the buildings set up by the landlord may suit the present tenant, but not at all his successor.

The difficulty of obtaining land in tenure in small plots at reasonable rents has long made itself felt in all countries in which tenancy, as contrasted with ownership, prevails, therefore also in our own. But although, even among ourselves, the burden of such difficulty has been great, it has not been brought home in quite the same galling form, actually provoking to rebellion, in which it has been made to press upon the shoulders, say, of the poor cultivators in Italy and Roumania, the case of which two countries will help to explain the nature of the problem

set before us, as well as to give a clue to its solution. Ireland has had its middlemen, making money out of "gombeening" land—hiring it at moderate rents and subletting it at usurious rates. Modern legislation has checked that. Our own small men have rather been denied the use of land altogether, or else been made to pay for it through the nose, but still to the genuine landlord, whose severity is kept somewhat in check, either by his own humane disposition, or else by public opinion. In Italy and Roumania things have been very much worse. Poor people in those countries had no choice but to live on and by the land; there was no alternative for them. But access to land at reasonable rents they were wholly debarred. There were middlemen between, to whom humane considerations were foreign and who designedly drove the severest of bargains that proved practicable.

The reason why landlords, whether in Ireland or in Italy or Roumania, so readily employ middlemen to let their land for them, is easily explained. Landlords—who in the foreign countries named are indeed grasping enough—would not needlessly forego the higher rent which a small holder legitimately *can* afford to pay, much less the extortionate rent that he may *be made* to pay by a grinding middleman, if there were not some counterbalancing advantages to be got by the seeming sacrifice. Such advantages consist in the avoidance of considerable trouble occasioned by having a shoal of men to deal with instead of only one, and also of much petty inquiry, oversight, cautionings, adaptations of terms, and more-over in the obtaining of better security. When it comes to a dispute, the small holder makes a very poor "defendant"; when it comes to foreclosing, a distressingly disappointing distrainee. To press him may mean to have to employ measures from which a cultivated man's

instincts recoil. Our landlord may be perfectly ready to profit by them, so far as they are employed by another—just as the gourmet, who would not for the life of him commit so unsportsmanlike an act as shooting a lark or the cruelty of crimping a live cod, is ready enough to eat of both toothsome delicacies, when others have committed the “barbarity” for him. The middleman has some security to offer, one form of which consists in the consciousness that the success of his business depends upon his punctual payment of the rents, which involves his regularly obtaining them from his sub-tenants. He can watch, worry and prosecute without losing caste. So it is in Italy, and that accounts for the excessive rents exacted from its *contadini*. In Roumania the hardship has a further sting in it in the fact that a considerable proportion of the oppressive middlemen, grinding the tenants, are men of a foreign race, and because, in addition, the extortioner takes out his rent to a large extent in laborious *corvée*, meted out with no stinting hand. Under such conditions it is not surprising that the oppressed tenants should have combined to shake off the yoke. The State helping, with powers and with money—provided that the societies forming to rent land independently can show sufficient capital of their own to justify the enterprise—the movement has progressed rapidly and, although it was only begun in 1903, by the end of 1909 it had come to embrace 275 societies, with 46,071 members, disposing of about £51,000 of share capital, and renting 276,302 acres of land, at an annual collective rent of £222,980. It had gone on extending at a progressive ratio. The last year's addition to the roll amounted to 103 new societies with 22,835 members and £17,000 share capital. The Italian *contadino's* servitude was not quite as oppressive. But it was grinding enough. He, too, accordingly sought refuge in collective renting, by means of societies, the origin of which is due in the main

to the active propaganda of the *braccianti* of the Romagna, who consider themselves socialists but make capital co-operators, and who have by their agitation infused new heart and hope into the rural population of northern Italy. The movement is of quite modern growth. The statistics published do not go down as far as one might wish. But in 1908 there were known to be about 150 such societies in existence, cultivating among them about 200,000 acres of land, and making life worth living to its own emancipated cultivators—all the more that they were careful to practise co-operation in their husbandry as well as in their collective renting. According to a statement quite recently made by the Deputy Professor Samoggia, who has taken the lead in the movement, there are at the present time about two hundred such associations.

These poor people combined to throw off an oppressive yoke. Our small cultivators and would-be cultivators are not in anything like so bad a case. Societies like the *obstei* and *affittanze* might prove exceedingly useful and convenient among ourselves—and very profitable to tenants—for obtaining land from willing landlords, as a matter of private arrangement. And such utility is likely to become still further accentuated when we come to promoting land settlement by transfer of ownership, as we are likely to do before very long. To a moderate extent the principle embodied in this method has already been applied, apparently with success, by the Northern Allotment Association. And the large movement of land settlement now proceeding in Prussia, by the interposition of the State, which is by itself responsible (there are other agencies at work besides) for at least a million of acres transformed into flourishing communities of peasant holdings, may be taken to be based upon the same principle.

A very brief sketch of the system there employed may be thought not altogether out of place at this point,

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since occasional reference will have to be made to it. It has answered brilliantly, and something similar appears applicable to ourselves.*

Under existing rules the plan for the partition of an estate among small holders has in Prussia to be submitted by the landowner, whose business it is to find suitable and willing purchasers, and to arrange with them amicably in what manner and for what consideration he is to parcel out his land among them. Provided that his proposal is judged deserving of adoption, a special authority, nominated by the Crown for a determined district—which is judicial rather than political, and therefore independent of Departments—takes over the whole transaction to its own account, which means a very material saving of expense and trouble to the vendor, and on the other hand the certainty of becoming possessed of a holding provided with all requirements—compact, accessible, in heart and so on—to the purchaser. The work being completed, the owner is, to the extent of three-fourths of the value ascertained by special valuation, paid by the State in landbonds, which he can without difficulty dispose of in the market. For the remaining fourth—which may be actually reduced by the valuation exceeding the sale price—the landlord is directed to look to the purchaser, or else to the market taking up his “second mortgage.” The amount taken out in landbonds is paid off by sinking fund, at a moderate rate, in about sixty years. And so the transaction is completed. The State now sacrifices about £25 on every holding, to equip it handsomely, beyond what is really necessary. But until such generous practice was resorted to, the entire transaction cost the State absolutely nothing, but all the same secured to the

* On the point of financing the creation of small holdings as freeholds see the Author's article “Small Holdings and Landbanks” in the “Economic Review” of April, 1912.*

vendor a better price than he could have obtained in the market and, on the other hand, fully satisfied the purchasers. Obviously, *mutatis mutandis*, the same principle might be applied to mere letting.

Our present business is, however, with the Act of 1908, which is practically certain to govern present transactions in the creation of small holdings, and with the best way of setting that Act in motion by means of co-operative action. It may be as well at once to correct a misapprehension with regard to the Act named, which is widely held. It appears to be thought that the Act permits the creation of small holdings only by way of tenancy. That is a mistake. The Act enforces tenancy in the case of land taken over by a County Council in virtue of the power conferred upon it under the Act. Such land may only be let in order that a guarantee may be procured for its employment in the way which alone is held to justify its expropriation; or else in order that, such employment failing, the County Council may be in a position to hand back the land to its previous owner in something like its original condition. In cases in which the owner is willing to give up his land, disposal of it may be proceeded with at the contracting parties' unfettered choice. In such cases the co-operative method of renting or buying is sure to be of advantage both to the owner and to the incoming settlers. For it secures to the former one sole body to treat with, which ought to be in a position to undertake responsibility for meeting engagements, and which certainly will relieve him of the trouble of collecting rents from individual holders, and of the trouble also of supervision and watching that there is no abuse. And, on the other hand, it assures to the settlers more favourable terms—such as are justifiable under the circumstances—and the certainty of conditions under which he may co-operate with his neighbours in the pursuit of his hus-

bandry, which is rightly held essential to his success. The vendor will obtain better security, because in a co-operative society the totality of members makes itself answerable to him in the place of any one of them. The burden of supervision resting upon him will be lightened, because every member of the society, being himself responsible, will be interested in preventing default by any other. The facilities so provided by small occupiers so established for practising further co-operation, after the co-operative obtainment of holdings, are for the present still frequently made light of; certainly they are not rated at their full value. But in course of time they are likely to be regarded as really the most substantial advantage of all secured, and the reason why Co-operation is resorted to in acquiring the land ought far rather to be considered to be the provision assured for settlement in groups, as contrasted with isolated settlement—without which small holdings settlements must be considered to afford no sufficient prospect of success—than in the mere economy and convenience effected in the first obtainment of land. It is decidedly encouraging and satisfactory to read that in Mere, in Wiltshire, “members are beginning to co-operate” (*scilicet* for common purchase, common employment of machinery, and so on). But what one would like to see is that members should so co-operate from the very outset. That is the surest way of arriving at success. And it should be provided for in the original rules, as a goal to make for in any case.

After distinguishing, as we should, between small occupiers buying their holdings or hiring them—whether through a small holdings society or otherwise—it may be well to mention an intermediate method, which offers not a few advantages wherever there are sufficient funds to prompt its adoption. As between buying and renting altogether the question really is mainly one of funds.

The intending small holder who possesses sufficient capital to buy his holding will in most cases, though not in all, fare better by doing so. He will thereby obtain absolute fixity of tenure, such as County Councils are not in a position to assure to him. In addition he will secure, be it in returns, or be it in ultimate sale price, much benefit which under tenancy must be lost to him, and a property with which in his improvements and his management he can fully identify himself—something of his “very own.” He will also be entirely free to make whatever dispositions he may choose in his husbandry, without regard for covenants or anyone else’s wishes. However, it would be a mistake, for the sake of such advantages, substantial as they are, to sacrifice money which would be more remuneratively employed as working capital, such as nowadays there must be in comparative plenty to ensure success. Ample working capital which, coupled with intelligence, will command success, must in every case be provided for.

The intermediate way here referred to applies the same principle to landholding which Mr. Vivian and his friends have with such marked success applied to housing. The suggestion of so applying it proceeds from Mr. W. L. Charleton, the founder of the Agricultural Organisation Society, and a faithful pupil of Sir Horace Plunkett. It consists in a society collectively buying an area, parts of which it afterwards lets separately to members, who by such process become landlords and tenants at the same time—landlords collectively with their fellow members, for all profit goes to the society; and tenants individually as holding their holdings on lease to be determined, should occasion arise, by their own choice alone. Such arrangement assures to them all the benefits of full freedom to move away, which the advocates of tenancy hold to be so essential, at the same time that it gives them absolute fixity of tenure, if they choose to claim it—under a land-

lord who is bound to be fair-minded and to understand their needs, because the landlord is themselves. This arrangement also lays a sure foundation for that co-operation in the cultivation of small holdings which is now, as has been said, recognised as so essential to their success. And it may be taken to assure to those who join in the enterprise—provided that they act at all prudently—a progressive increase in the capital value of their property. The consideration for all this is additional capital, which should not be measured too sparingly. There must be a substantial stake for every member in the collective enterprise. There is far too ready a disposition now to rely upon loan capital—loan capital pleaded for without a realisation of the essential condition of adequate security. In his model rules Mr. Charleton makes no provision for a minimum holding in shares. It would probably be wise to adopt a rule corresponding to that of Mr. Vivian, which makes the acquisition, in succession and *by very easy instalments*, of five £10 shares obligatory in his housing societies. Small holders who are not in a position to provide the necessary capital had better trust to the County Council or such other landlord as they can find, and keep their little funds for working capital.

To return to the question immediately before us—the advantage to a County Council, of all bodies, as an intermediate authority, called upon to set the Act of 1908 in motion, of having to deal with a co-operative society of would-be tenants rather than with a number of single applicants, must be manifest at first glance. Not only will the Council—provided that ordinary dictates of prudence are observed—have only one body to deal with in the place of a number, and that, as has been shown, a body offering much improved security, both for engagements and for supervision; but its whole labour of proceeding with the acquisition and the laying out of land will be

simplified. It will be able to deal with larger areas. Cases have of course occurred in which one man has, on the strength of the Act, claimed, say, an area of twenty acres, when the Council might easily have obtained eighty. To satisfy the applicant, without consideration for the proposed vendor, might have meant ruining the latter's estate. Making allowance solely for the landlord must leave the applicant with a grievance, which is not likely to pass unnoticed in these days of newspaper publicity. Such a thing could not happen where applicants combine—as in reason they may be expected to do where there are a sufficient number—to apply and act in common. There has been much controversy as to how County Councils ought to proceed, in order to do justice to the intentions of the Act. Ought they to defer buying land till they have sufficient applications for it? Or ought they to buy in advance at their own risk? In the latter case applications may fail to come in, after the land has been purchased; or applicants may decline to take up their particular holdings. The whole matter would probably be much simplified if the authority called upon to deal with it were not a County Council, but a body created for the special work, possessed of expert knowledge, acting, it may be, under the Board of Agriculture, but endowed with some independence and responsible for itself. That is what has succeeded so well in Prussia. From such a body Small Holdings Societies might also be found more ready to accept guidance and oversight, and its counsel and assistance might even be welcomed as very useful.

Some few suggestions applying to the formation and direction of Small Holdings Societies may be not out of place.

In an address published in the *Journal of the Board of Agriculture*, the present Assistant Secretary of the Board of Agriculture, Mr. Cheney, very rightly lays stress, as has

likewise been done here, upon the necessity of starting with sufficient capital. That point will still have to be dealt with a little more in detail. There is no denying the justice of Mr. Cheney's admonition. However, in company with the experienced leaders of the German settling movement, who have passed through a long instructive training, I hold another point, to which unfortunately among ourselves too little regard is still paid, to be of even more pressing importance, and that is the fitness of the intending settlers for their particular work. Such fitness will justify the setting aside even of the otherwise most wholesome limits which the Board of Agriculture lays down in the matter of capital, and the substitution of a more elastic rule. The Board of Agriculture insists, as security, upon the provision of three years' rent ; or else only six months', if paid in advance—provided that the total of the uncalled share capital does not exceed a further eighteen months' rent ; or, in the third place, it will accept an approved guarantee added to the first six months' rent. The lastnamed condition, the guarantee, merely shifts the burden of risk of non-payment from the Council's shoulders to those of the guarantor, and at the same time introduces the rather objectionable element of dependence upon someone else which, wherever possible, Small Holdings Societies ought to study to keep clear of. We cannot find acceptable guarantees for all small holdings settlements to be formed. Under the Prussian rule—which, as observed, deals with instalment purchase, not with renting, but without altering the principle—the incoming settler is required to provide one-fourth of the purchase money agreed upon. That is none too much. He may also be called upon to prove the possession of sufficient working capital. However, provided that the settlement scheme is judged promising, and *the man fit for his business*, the General Commission—that is the special authority ad-

judicating in the matter—has been found to content itself with considerably less.¹ There are cases in which the purchaser has been let off with only one-tenth paid down. And there are also cases—mainly in the Polish provinces—in which either co-operative banks, being given appropriate *personal* security, or else bodies like the Hanover Old Age Pensions Fund, dealing with the matter as a matter of mortgage, have provided the entire last fourth by credit. There is something similar in force in Belgium, under the General Savings Bank's admirable housing scheme. That is one of the advantages of having an authority to deal with the matter of which the strings are not pulled automatically in a red tape way from headquarters, which is allowed discretion of its own, is locally in close touch with the settlements, and trained to its particular business. The confidence so bestowed on settlers has been shown not to have been misplaced. In fact, German settlement officers—who are really the only persons affording a precedent, by reason of their long practice—make a very great point of ascertaining the technical qualifications of settlers. In Italy the matter is in the hands of the *contadini* and the *braccianti* themselves, who have grown up in agricultural work of the simple kind that will answer for their purposes. So there is no fear of "tinkers, tailors and candlestick makers" being recruited for work to which they are quite unaccustomed. The same thing holds good in Roumania. In France the movement is perfectly new, and the facilities of cheap money advanced for a comparatively short period not exceeding twenty-five years—granted only since March, 1910—are effectively restricted to peasantry and country labourers only. In Germany it has been found that townsmen—such as we are fondly persuading ourselves that we may find homes for and employ on their own account in the country—will not do. They break down.

or else get into mischief—unless it be that they are country folk simply coming back to their old calling after an episode of town life. On a small scale we have had the same experience in this country. In the fortunately defunct English Land Colonisation Society we were found—some fifteen years ago—to have settled men as tenants in Hertfordshire who knew nothing whatever about agriculture and accordingly fell into the most ludicrous mistakes—which our Honorary Secretary, now a Cabinet Minister, begged us urgently not to reveal to the world, “lest the thing be misunderstood.” There was no room for misunderstanding. The thing was as plain as a pike-staff. In Prussia even country schoolmasters have been found to fail, and are in consequence no longer accepted. Farm servants, labourers, and peasants’ sons are found to make the best settlers. And since a long time back no others are accepted. It is found desirable that they should, if possible, belong to the district in which they settle and should know it well. In Roumanian *obstei* that condition is insisted upon. In Germany connection with the locality is looked upon not purely as a matter of being used to local ways, understanding accepted practices and being familiar with local husbandry, but also of having friends near with whom, if necessary, to exchange services, and of being in consequence well known, so as to be capable of being trusted.

Wherever we apply the provisions of the Act, through the regulation intervention of the Board of Agriculture and of County Councils, we are, more especially in view of our ingrained easy-going habits, scarcely likely to engage in the same minute examination of applicants and their circumstances. It is just at this point therefore that Small Holdings Societies are likely to commend themselves as most effective substitutes, and more than that. We shall have to realise that settling small holders on the

land is not a mere mechanical operation :—Here is a holding, there is a settler ; join them together, finance the business, and the thing is done ! We shall have to bring ourselves to look to the old Berrichon peasant rule : *Tant vaut l'homme, tant vaut la terre*. A suitable man is sure to make a successful small holder, even under financial difficulties ; an unsuitable man cannot make a success of the undertaking, even though his pockets be filled with gold. However, when we proceed by means of co-operative societies, the co-operative society may be trusted, in its own interest, to make sure that its members are at any rate *prima facie* suitable settlers ; because, if they were not, the other members might have to pay for them. And it will check and control them, take care that they do not fall into arrears, because for every default it will, as a whole, have to answer.

That naturally leads us on to the point already touched upon of funds. The members of the society enter into joint liability, which is to be responsible to the landlord for rent, and to any other creditor for whatever claim he may rightfully possess. However, after all, since we cannot contemplate any but strictly limited liability—in Roumania the liability is advisedly made unlimited—it will be found on calculation that that does not really amount to very much. Our Small Holdings Societies as a rule impose upon their members the obligation of taking up at least one share, for the most part fixed at £1, upon which probably only 5s. will be paid up. That leaves 15s. per member to be drawn upon. That does not supply overmuch margin. And it is just in the earliest stages, when none of that reserve fund is yet accumulated—which common prudence will dictate to the Society to gather up scrupulously out of sub-rents advisedly not too generously cut down—that the want of common liability will most acutely assert itself. For it is in traversing the first

rough ground that most failures are likely to occur. Such consideration seems to prompt the suggestion that rather more ample provision for funds should be attempted. For instance, Mr. Vivian's "Tenant Co-operators" might serve as an example. At the very least the obligation to take up shares ought to be proportioned, as it is in the case of the Eastern Counties Farmers' Co-operative Association (formed for co-operative purchase and sale), to the size of the holding. The share capital once formed, the accumulation of reserve should be accepted as the most pressing duty. That can be provided for only by keeping rents for the first period up to not too much below current market rate. Under ordinary circumstances there ought to be plenty of margin. And there is some danger in making things too easy from the first. Some settlements abroad have done questionably in consequence.

Seeing how important a matter is the presence of available funds, a most desirable adjunct to the Small Holdings Society will be a Co-operative Credit Society, if possible from the very start. Provided that care has been taken, as has been here urged, that there is sufficient mutual knowledge of one another among members, the circumstances of the society are certainly suitable for this. Without adequate mutual touch and knowledge, however, it must be admitted that the matter presents difficulties. In the Prussian anti-Polish settlements—which are a different thing altogether from the settlements here held up as possible models—the formation of credit societies has proved difficult, because the small holders in question were recruited from the most different parts of the empire—some even from Switzerland—and were therefore unknown to one another and wholly without touch. You cannot under such circumstances expect people to enter into unlimited liability for one another. However, otherwise in a new settlement a co-operative

bank is bound to prove of the utmost utility. There will, as has been already observed, have to be co-operation beyond that for mere settlement. To practise such, every description of co-operative apparatus needed is likely to have to be newly raised up. And in doing so a bank is sure to prove of advantage. It may be turned to account for facilitating not a little the arrangement—the benefits of which are in themselves so apparent that resort has been had to it in the cases of several of our existing pioneer small holdings associations—of a cash credit opened by some Joint Stock Bank in the vicinity. The objection sometimes put forward that mere tenancy opposes an obstacle to the practice of co-operative credit, inasmuch as there is no freehold to answer in the last resort as security, should not be permitted to deter people. Co-operative credit of the kind here referred to ought in any case to be based upon *personal* security, not real. It answers among the Italian tenantry, which is certainly not remarkable for excessive wealth. And tenancy—as I have elsewhere quoted the late Tullio Minelli, for a long time the successful managing director of the Co-operative Bank of Rovigo, which has almost exclusively tenants for its credit customers—serves to keep the credit dealt in purer than freehold, for the very reason that it compels the givers of credit to look exclusively to *personal* security, instead of permitting mortgage security, quite improper under the circumstances, to push its way in as an alloy. As regards the taking of deposits, a small holders' society is quite unsuitable for that. It is the bank which should be intrusted with such work.

It is not quite easy to lay down rules for proceeding with the setting up of new buildings, where such are required. This is a point which is likely to cause some trouble, because the leases given are not thus far in themselves long enough to recoup outlay by the society, which

of course is not likely to be overburdened with cash. On the other hand, for the landlord, who in this case may conceivably be called upon to hand back the land expropriated to its former owner—the tax upon whose purse in the way of redemption will in fairness have to be considered (that marks a considerable difference from the case of the ordinary landlord)—building a number of small homesteads on land which twenty or thirty years hence may have to be either given up or else reapportioned in quite a new way, and for different kinds of cultivation, presents more serious difficulties than in the case of large farms, the nature of whose employment is not likely to change much. One particular attraction of the Prussian system is that the incoming settler is allowed to set up the buildings for himself, to suit his own taste. Towards this he is given financial assistance, which is dealt with as distinct from his payments for the holding as a whole. Repayment of the principal is made to proceed at a more rapid pace. (Our societies will do well, by the way, wherever really new farms are created, with their own homesteads, to copy the Prussian method in taking care that every such farm is suitably laid out, with independent access, a decent road, a fairly compact shape, a proper allowance of natural grass, and so on.) Any repairs occurring, just the same as fencing and the like, the Society will of necessity have to undertake on its collective account, recovering from its members according to their several liability—by preference by one sole payment for all charges: rent, rates and all. Wherever buildings have to be set up—and one may hope that the occasion will soon arise, or the Act will miss half its object—arrangements will have to be made appropriate to each case. But, as observed, with slender funds on one side and not excessive willingness on the other, that may prove not quite an easy matter.

Since a Credit Society has been suggested as an organisation to be set up by the side of the renting society, it may not be amiss to urge once more due provision to be made, right at the outset, for co-operative buying, of farm and domestic requisites alike, for co-operative sale of produce, and for combination for work such as has been spoken of in connection with the *associations syndicales* of France. There is also likely to be room for common purchase of implements and machinery intended for common use—such as is already exemplified by the society at Kingsthorpe, owning a mowing machine, which is let out to members. Such common use of machinery—and not a few implements not ordinarily of daily use on the same farm—has been found of considerable utility in many foreign agricultural co-operative organisations. And there will be no harm in admitting non-members to the use of these things—at a slightly higher charge—where the number of members is not sufficient to give them full employment. By the side of, the purely material wants so supplied, educational wants—which make for greater material success—should not be neglected. Although the rudiments of Co-operation are easy and readily intelligible, there is a good deal in Co-operation that requires to be taught, if it is to bring forth full fruit. Should such educational endeavours give rise, as in the Co-operative Union, to the cultivation of the social side of life, there will be no harm done; only one would not like to see “whist drives” once more allowed to rank as “education.”

There is no occasion to say much about the size of the society to be formed. Other things being equal, as a matter of course, the larger the society, the smaller will be the risk of individual failures, the more considerable is also likely to be the reduction of rent to the individual holder, and the greater will be the strength of the society. The broader the basis, the more stable is the fabric sure

to be. However, the point will have to depend entirely upon the circumstances of each case. An experiment, which has not yet proceeded very far, has been entered upon of grouping societies on various sites in one union, or rather of starting societies as offshoots from one central organisation. That is likely to prove useful as a matter of comparing notes and undertaking any work of research or education—also, it may be, for rather considerable collective purchases or sales. On the other hand, it is a sound principle in Co-operation that responsibility should not be interlaced. Every settlement will have to stand financially upon its own bottom, have its own responsible organ of management, and answer for its own liabilities only.

There are a variety of types of societies possible. We have got a few at present—a society of small dairy farmers at Mere; a society of market gardeners at Biggleswade; and there are societies for general farming. Under ordinary circumstances a society laying itself out for some special culture would appear to have the best prospect of success. For the small man cannot well compete with the larger and with the foreigner in the production of ordinary farm produce. He requires to be engaged upon some work in which the advantages secured by the restricted size of his holding, favouring more watchful and intelligent labour, more minute oversight and larger expenditure in proportion upon fertilisers and feeding-stuffs, prudent adaptation of cultivation to every rod of possibly varying soil, and the like, are likely to tell. They may be made to tell, on not too small holdings, in cow-keeping and dairying; they are bound to tell in market gardening and the raising, more particularly of *small* fruit; and, according to the suggestions of a German critic of our agriculture recently quoted prominently by two of our leading political newspapers, we shall have to seek

for more " industrial " crops suitable to our soil and climate. To a great extent the secret of the strength, more particularly of German, but also of French, small husbandry lies in the cultivation of such special crops, which make a larger demand upon the purse, muscles and headpiece of the cultivator, but repay him more than in proportion. Whether tobacco will prove one such wealth-bringing crop, must depend upon the taste of our smokers and the rulings of our Treasury. With respect to sugar beet, the amount of menial labour required, the unpleasantness of the work to be bestowed in the factory, and the striking disproportion between the yield per acre, severally of sugar beet and of mangels, grown for feeding purposes, appear to militate against its rapid extension. And in sugar making the proportion of shares that can be taken by our small cultivators threatens to be only small, because there will have to be a very much broader foundation of cultivation than these men can supply—and the capital raised for such enterprises will have to be large. However, for market gardening and fruit growing the prospect seems to be of the most promising. And for their produce we have the best of markets at our very door. We still import enormous quantities of such goods from abroad—fruit either raw or in pulp. Half the black currants produced in their rich favourite home of Burgundy come to us in one of those two shapes. We might just as well grow them on British soil. But at this point, once more, it is not only the growing that is wanted. Concurrently with the laying out of fields for such produce, our co-operative small holders will have to provide co-operatively for methods of marketing them. That is really the most pressing point.

As regards the size of individual holdings, likewise, it is impossible to lay down one uniform rule. Our settlements are likely to continue, as they have begun, very

much smaller than those devoted to the same object in Prussia, where entire estates, of a thousand, two thousand, or five thousand acres are purchased for the purpose, upon which new self-governing communities are made to spring up. We have not yet got beyond three, or at most four or five hundred acres. Thus far sub-division appears to have occasioned no serious difficulty. To take the two most frequently quoted instances—at Mere, where every applicant had his own needs, the division was effected amicably—as it is in the much larger settlements of freeholders in Prussia, for which the plan of distribution is prepared before the scheme is reported to the authority. That is also the way in which the co-operative Raiffeisen societies in Germany proceed on their own account, whenever some property comes to be offered for sale in a parish in which there is a demand for portions of it. The property is pegged out in plots, according to the preferences of intending bidders, and offered at a mock auction, the result of which binds the bidders, but not the society. Should the sums offered prove sufficient to pay for the estate, the property is at once bought by the society and divided as was planned. An arrangement of this kind is the best that could be made, giving greatest promise of enduring contentment. In Biggleswade, on the other hand, where, for market gardening purposes, and owing to the peculiar lie of the land, individual preferences do not appear to have existed, and the same plot (of five acres) would do indifferently for any one, selection was decided by lot. That presupposes equal, or fairly equal, lots. However, such condition is not by any means indispensable. Settlers want to please themselves and take large or small holdings according to their requirements. In Kingsthorpe, in Northamptonshire, where a farm of 335 acres has been laid out in small holdings, by the Town Council—not the County Council—the size of

holdings varies between 2 acres and 55½ acres. The more individual settlers please themselves, the better is the society likely to answer. Thus far, although holdings among themselves vary not a little in size, the average area has remained small. In Mere, the largest property yet acquired, measuring 432 acres, there are twenty-eight tenants, all of them previously residents in the locality. In Biggleswade, the newly settled area, covering 276 acres, there are thirty-nine tenants. In Wayland, 285 acres (let for fourteen years only), eight tenants. In Kingsthorpe, 335 acres, sixteen small holders and seventy allotment holders. All this means, as the Act in the main intended, settlement on a small scale.

The rents will require careful regulating. In Mere—where the value of the soil varies not a little, owing to quality and situation, every field was valued separately by a skilled valuer. As a consequence rents vary in amount as between 22s. and 44s. an acre. It does not follow that such precedent will necessarily have to be followed in every case. The local people intending to settle will in many cases be quite equal to determining the proper value and rent among themselves. But the allocation of rent should in any case be carried out with due regard to real value; and it would not be fair at a subsequent renewal of the collective lease to upset such settlement, more particularly if that were to be on the ground of the individual tenant's own improvements in outlay or labour.

It will be agreed that in conducting settlement under the Act of 1908 there is plenty for co-operative associations to do, and by no other means could that which has to be done be accomplished more effectually than by such societies. Undoubtedly the Act limits their power and their opportunities. And official practice, which is given to running in grooves, limits them still more. One would

have wished for more elasticity, greater boldness, larger propelling power. The idea of the intending holder applying, the County Council, as being the rating and governing authority, awarding, and the Board of Agriculture supervising, seems in itself admirable. However, we know that things do not invariably work out as it is imagined that they will. Wheels get clogged, springs get worn, and the machine is in consequence found to move slowly or irregularly. However, what was passed in 1908 does not bar out further improvement. And, if there is anything calculated to infuse greater energy and more popular initiative into the apparatus thus devised, it is small holdings societies, in which settlers best learn their own needs and create force to assert their claims. Wherever there is a desire manifested to acquire land, such societies should accordingly be formed. They will of themselves be likely to produce propelling power. But it will have to be borne in mind that the most substantial and most abiding benefit that they can secure for their members is not the actual parcelling out of the land, but the admirable opportunity so created for further co-operation in turning that land to account.

XV.—EDUCATION.

It was with Education—with the creation of the “High Schools,” long since grown famous, to be soon after followed by Agricultural Training Institutions—that the “Fathers” of Danish Agricultural Co-operation, Bishop Grundtvig, Jestrup, Nøvregard, and their companions, began their co-operative propaganda. It was by Education also that the “Fathers” of British Co-operation, Vansittart Neale, Hughes, Holyoake, &c., studied to promote their cause. And every Co-operative Union worth its salt has written “Education” in large letters upon its banner and laboured to diffuse and perfect Education. In truth, the very essence of Co-operation is Education. It constitutes its most precious element.

It was a perfect revelation to our insular co-operators when in 1904, on the occasion of our International Co-operative Congress held at Budapest, I placed before them in our Congress Volume a conspectus of the abundant and varied educational work carried on by Co-operative Unions—mainly Agricultural—abroad. Our own co-operators likewise cultivate Education, and endow it largely—with more than £90,000 a year. And although much of that sum goes in entertainments—which are charitably supposed to be “educational”—no one can accuse them of failing to appreciate highly the great value of Education, or aiming honestly at its extension. Indeed, sound Co-operation without Education placed well in the forefront, is unthinkable. It would cease to be Co-operation. Of Education Co-operation was begotten, and to Education it must tend. We observe this effect already to a rather

marked degree in India, where Co-operation is still in its first youth. Young as it is, it has taught people to long for Education, and for Education they clamour with so much earnestness that, for want of other means, in the United Provinces a number of societies make their secretaries give the growing generation instruction during two hours a day.

It seems to stand to reason that in rural districts, above all things, Co-operation should be made educative, because in such districts touch among human beings is looser than in towns, and there are fewer other helps to intellectual improvement. Population is more sparse and the things which tend to stimulate the thirst for knowledge are more sparingly distributed.

It is perfectly true that our public Departments—of Agriculture and of Education—now appear fully alive to the importance of Education, and actively engaged in promoting its diffusion. And it may well be asked: Under such circumstances, what room is there for co-operative action on the top of what is already being done by two such powerful agencies, supported, as they are, by the County Councils acting voluntarily in their own particular spheres? The answer is that there are different ways of instilling information, and different avenues to the conception of knowledge. By all means let authorities multiply farm schools, winter lectures, agricultural colleges adapted to various grades! Such institutions instruct in one way—only, unfortunately, for our case, there is very little that they teach thus far that applies distinctively to *Co-operation*. People have advanced beyond our point abroad. They already teach Co-operation in schools, in the army—for soldiers, who in due course will return to their fields—at colleges. In Germany there are no fewer than nine universities in which “Co-operation” is made a specific subject of instruction. And at the University of

Halle there is now a special "Seminary"—a university within the university—for Co-operation, at which some of the most distinguished co-operators of the country act as teachers to a growing number of students. However, everybody cannot go to Halle University; and if our elementary schools were to take to teaching Co-operation—which in all conscience they might—such teaching would go only a limited way. The Co-operative Society has other means of instruction open to it. It can enlist interest, teach by contact, by the eye, by the force of opinion among neighbours. People go to school or college and come away; and there the thread is broken. They remain in their society, and its schooling goes on through life.

Coming to our own country, let us put it in this way. Last year the National Poultry Organisation Society and the Agricultural Organisation Society, now happily united, ran in conjunction, as an altogether novel experiment, an "Egg Demonstration Train" to South Wales, which train served as a travelling cathedra for many stations, to which co-operative societies had been invited, and on which Mr. E. Brown, with all requisite appliances and produce at hand, taught his hearers a most useful lesson on the production of eggs. We have every reason to believe that this experiment has done good. But would anything like the same effect have been produced if the body organising the expedition had been a public Department? What was required for the purpose was a body of pupils willing to be taught, feeling that they were more than pupils, linked to the organising institution by a warm interest, such as membership naturally generates, a body of pupils who would go home and talk the matter over among themselves, knowing where they might without hesitation apply for further teaching, compare notes and encourage one another in carrying out what they had been taught.

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Here is another illustration. A gentleman authorised to speak for the Board of Agriculture has recently (individually) decried the employment of experimental plots—for which thirty years ago, with the assent of the late Professor Voelcker, I pleaded more than once at meetings of the Royal Agricultural Society. It is quite true that we have advanced since then; and also that our official friend spoke specifically of experimental plots to be “run” by County Councils. That is the point. Plots so provided might prove useful or not. Experimental plots maintained by societies might be counted upon with certainty to do good, just because the institution undertaking the work would be a society, that is, a body of men bound together by a common interest, mutual touch and a spontaneous desire to learn, having a voice in the regulation, and carrying interest home with them. We found that even in the comparatively brief life of our “Sussex Association for the Improvement of Agriculture”—visits to the experimental plots of which revealed on the one hand almost incredible want of familiarity with quite elementary scientific facts among leading farmers and land agents, showing how urgently instruction was needed, but on the other hand also imparted such instruction. Much of this was under the circumstances assimilated. Mr. Jesse Collings some twenty years ago lighted upon what, according to his own account, appears to have presented itself to him as an oasis in agricultural teaching, in the little kingdom of Württemberg, which struck him as so remarkable—that he thought that he must at once bring it under notice by publishing an account of it in a much read Review. Had Mr. Collings extended his inquiry, he would have found that practically the same system of instruction prevails all over Germany, even surpassing here and there in one point or another what he had witnessed in Württemberg. However, it is just in Germany,

certainly not undereducated, that, by the side of such very effective teaching provided by authorities, education by co-operative bodies, on their own account, and based upon the distinctive advantages which as co-operative bodies they possess, is the most highly developed.

There is another illustration which may help to bring home the point here pleaded for. Just forty years ago I prepared—without any mention of my name; it was a pure labour of love to assist a pioneer agricultural co-operative association—some coloured tables for the said society's journal, setting forth in what was then for this country quite a novel method, in red, blue and yellow lines the rudimentary chemistry of farm crops, fodder and manures. The tables proved a distinct success, more particularly one of them which, showing the flesh-forming, fat-forming, and total nutritive constituents of feeding stuffs, indicated also on the other side by broad green lines, in shillings—according, in the main, to Professor Sibson's calculations—the manurial value of the residue left, after passing through the animal. Mr. Disraeli's bringing in his Agricultural Holdings Bill in 1875 stimulated a great demand for this particular table among Members of the House of Commons. Here was a thing that could advantageously be issued only by an association, if it was to find its way among genuine farming folk—for whom of course it was intended—excite their interest and bring home its instruction! Of course the information there given is by this time out of date. New discoveries have been made and money values have altered. With some trouble I revised and added to that information a year or two ago, studying simplicity, so as to bring home in any one table only one particular fact, and rather multiplying tables than complicating information. My hope was that the Agricultural Organisation Society would gladly accept this offering and issue the tables. There were people who

thought that they would prove useful. However, my colleagues—evidently failing to appreciate the value of Chemistry as a handmaid to Agriculture—declined even to look at the drawings or to entertain the idea for a moment. Ah, it is easy to make light of Chemistry! But we cannot do without it. And just because it is so difficult for simple minds to master, does it want to be taught, in a rudimentary form, in such popular shape as coloured diagrams, teaching through the eye, supply. In Sussex, in the eighties, on our visits to our experimental plots, I found farmers of great repute, recognised as local chiefs of their calling, confessing themselves absolutely ignorant of the several functions of nitrogen, potash and phosphates as fertilising agents. They were in the habit, as they admitted, of buying confidently whatever their dealers might recommend. One important point in agricultural business, however, is to apply the right fertilisers and the right feeding stuffs for the purposes wanted, and to apply them in the cheapest and most effective form. In a previous chapter I have shown that Control Societies in Sweden have taught farmers to save money, while improving results, by substituting one kind of feeding stuff for another, and so reducing the expenditure, calculated in Swedish feeding "units," from 155 to 135 lbs. There are many similar economies possible, in manuring as well as in feeding; and it is distinctly for Co-operation to teach how this is to be brought about. And it is a gross mistake to brush this consideration airily aside as of no consequence, simply because oneself fails to discover its importance.

If it be asked on what classes of subjects co-operative organisations—it will for the most part have to be Unions or local Sections; for a tolerably broad basis is required—should study to impart instruction, there is one class palpably indicated by the very nature of the business

to be transacted, and that is Co-operation itself and the way of practising it, which includes such practical subjects as society management, society account keeping, and society inspection or supervision.

People want to be instructed in the work that they will be called upon to perform. Such work begins in the greatest simplicity, on a scale for which native motherwit is fully sufficient. But people will be foolish indeed if they are content deliberately to keep it down at that point; for its benefits cannot become fully apparent until it is expanded to a larger scale. The Toad Lane weavers required no commercial training. To-day, when we have a great co-operative movement, we have also methodical instruction, arranged for and conducted by the Co-operative Union, for store managers, window dressers, clerks, book-keepers, buyers and auditors. And such instruction is found of benefit in small stores as well as in large. Precisely the same thing is, in its own way, required in Agricultural Co-operation; and other nations, more advanced in this respect than ourselves, have systematically provided for it. The German Imperial Union, with its twenty thousand or so societies, has made elaborate arrangements for teaching in this particular matter, which arrangements answer well. You want to supply superior goods; therefore your buyers and managers must be made to know what constitutes superiority. You want to provide them cheap; therefore your officers ought to be made to know what are the current quotations in the various markets, which are the best and most trustworthy sources of supply, what is likely to rise and what to fall, and what causes fluctuations. One of these elementary matters is particularly important—and important also even in the earlier stages—for us, who cannot in other things yet, with our mere handful of societies, attempt to rival the great foreign Unions. That matter is account keeping,

auditing and inspection—the last named of which, although experienced co-operators abroad set the greatest possible store by it, we for the present, in our ignorance, are still pleased to ignore altogether.

As for account keeping, our farmers are notoriously bad hands at that; and small folk are not likely to do much better. But even in Germany, among co-operators of long standing, the very account keeping and drawing up of balance sheets occasion difficulty; and for this reason there is in the German Imperial Union a special department, which undertakes to deal with accounts for societies. The work of this department is highly appreciated and does a great deal to keep Agricultural Co-operation on a sound basis. It is not to be confounded with auditing, which is entrusted to an entirely distinct department, because it aims solely at the production of regulation balance sheets and current entries, serving for societies which cannot manage this themselves, and at the same time thereby instructing their officers and training them to do the work themselves in the course of time.

When it comes to auditing, the case presents rather greater difficulties. As a commercial nation we think very much of it; and more particularly at the present moment suggestions are plentiful as to how we ought to provide for it—mostly in the wrong way. The rule observed in the Raiffeisen Union, that all balance sheets and books and papers pertaining thereto shall be sent up ~~once~~ a year to headquarters for “revision,” has sprung from the difficulty experienced in Germany, as elsewhere, in finding sufficiently capable local auditors. It may be well to point out that the German “revision”—already copied in Austria and proposed in Italy—is in its original conception an exact counterpart to our own “audit,” suggested by such in the early days of Schulze-Delitzsch—which has, rightly enough, been expanded so as to become much

more—more particularly where credit societies are concerned—and now extending to an inquiry into the propriety of managing bodies' action as a precaution for safety. But, to speak of "audit" first, as we understand it—a most essential point—we hear various new methods urged upon us. One is to have a Government audit adopted—of which M. Luzzatti, as an old co-operator, has declared, with the hearty assent of many other co-operators of note, that it must turn out illusory. Our Board of Agriculture wishes to have the accounts of co-operative credit societies audited by managers of Joint Stock Banks—which is like sending a builder of palaces to supervise the building of a cottage or a pigstye. What people want to be made to understand is that there is an essential difference between joint stock banking and co-operative credit banking, and that auditing of co-operative societies' accounts requires an intimate knowledge of Co-operation, which is only to be got by special practice. Our Co-operative Union has auditors authorised by the Treasury for this very purpose. In Agricultural Co-operation we want men with similar qualifications, and we shall have to train them.

When it comes to inspection—the German "revision," which has provided such a pillar of strength to German Credit Co-operation—such among ourselves as are willing to concede it appear ready to entrust it just to "any one." Our societies might have to pay dearly for that. The matter wants to be learnt.

In Germany—where certainly popular schooling—cannot be said to be defective—very great attention indeed is paid by Co-operative Unions to instruction in these and other branches of knowledge. There are special courses of lectures everywhere, in every province, made a great point of, in which subjects are taught, either singly or in groups. Attendance at these lectures keeps steadily increasing from year to year. There are courses of two days, of

three or four days, or a week, up to four weeks, which is in Bavaria found to be the most desirable length of time. One week's pupils, so the authorities report, have frankly avowed that what they have learnt has very quickly evaporated. Four weeks' pupils go home thoroughly well grounded—in other matters as well. It is in these courses that lecturers and organisers are trained. The pupils are in Bavaria all young men, of about twenty or a little over, deliberately restricted to such age. The Union and some local authorities contribute towards their expenses, so that the cost of the training is to every one reduced to about thirty shillings for the four weeks. Where courses are shorter it is brought down to less, even to five shillings only. The authorities also provide some entertainments, so as to make things pleasant. But they study chiefly to make the youths spend their evenings at meetings arranged for the purpose, at which the subjects taught in the day time—and other matters connected with Co-operation—are discussed. And the consequence is that these young men, who as a rule come to the training timid and gauche and unable to express themselves, go away fairly good debaters and versed in public speaking. In other parts of the Empire the qualification as to age is not observed in the same way. And there you have men—and also women—of all ages and all callings flocking to the lectures to qualify themselves for creditably filling their places in societies—clergymen, schoolmasters, tradesmen, and so on. The training of "revisors"—inspectors, as we should call them—is treated in a more serious way still. People do not, abroad, trust blindly to the conceivably untrained Committee-men doing automatically what is right, and leave the rest to Providence. In the Herr Haas' Union there is a six months' annual course of training for "revisors," with an examination following and the awarding of certificates. In such a Union of course

there is scope for making a living out of expertness in "revising," and not a few people take the instruction up with such an object in view. But there are others who simply desire to qualify themselves thoroughly for good work on co-operative Committees and Councils. In the Austrian Union this useful practice has only been recently introduced and for the present the Union is still content with a three months' course, the utility of which has already been demonstrated. In Germany these lectures are found now to attract pupils of other nations. Would it not be well to send some Englishman there? Those who employed him would have a better account to give of their work. The index of subjects taught indeed ranges over a wider field than would be at all necessary for ourselves. In addition to book-keeping and auditing it embraces co-operative law, the law specifically relating to "Unions," the practice of "revision" and other cognate matters. Law and regulations as to stamps and taxes are more intricate and complicated in Germany and Austria than among ourselves, and authorities not unfrequently show themselves unduly grasping, for which purpose "revisors" ought to be well instructed so as to be able to fight them. That may account for somewhat greater length of the "courses." But the general subject certainly wants to be taught in its details, or there may be losses, and even collapses to deplore.

And there is the teaching of women. However much some modern women may fret under the ordinance, Providence has made us male and female and assigned to each sex particular functions and occupations. There are in Agriculture certain things which are undoubtedly better done by women, as there are others which naturally fall to the share of men. And woman's province in Agriculture is by no means the least important. An Alsatian proverb has it that a "farmer's wife can carry out of the

farm in her apron more than the farmer can bring in on a four-horse wagon." The complaint is frequent, and it is not unwarranted, that the education of our country-women in housewifery, and also in their own peculiar province of Agriculture, has been too long and too greatly neglected. Even though the milkpan has been superseded by the separator, we cannot do without women. And there would be many a one thankful to see *cuisine à l'anglaise* replaced by something more appetising. Our country has not remained altogether barren in the provision of educational institutions for country women. But there is in good sooth plenty of room for more. We know the foreign organisations of this kind best—by name—from the Belgian *Cercles de Fermières*, which have of late come to be a good deal advertised, and which in truth are highly useful institutions. But these in themselves are only an offshoot from the associations abounding in the United States and in Ontario, which last named province is remarkably forward in the matter. It was from an expedition of inquiry to the United States that M. De Vuyst, of the Belgian Ministry of Agriculture, brought home the idea which led to the establishment of the first women's association at Leuze, in 1905. The United States educational organisation, the Farmers' Educational and Co-operative Union, with its membership of (as its President claims) about two millions, is of course grandiose, but it is not all educational. And one does not know how far, according to our ideas, it is "co-operative." There is probably more "business" in it. The Canadian institutions excel by their quality and their active work. Since 1905 the Belgian "Cercles" have multiplied and gathered much strength. There are now at least sixty. Everywhere the movement has been taken up with encouraging vigour. The "Cercle" of Berlaer (Antwerp) managed in less than two years to attract nearly two

hundred members. The "Cercle" of Goor did even better in the same time, and got well over two hundred. The teaching is in some "Cercles" rather comprehensive. Housewifery, dairy management, poultry management, and so on are, as a matter of course, everywhere taught. Housewifery includes the provinces of dress and rather improved cuisine. Appended to it is the bringing up of children. Gardening is also taught, alike as a matter of business and for introducing brightness into farm life. Beyond this, hygienics of the house and the stable are not neglected. The co-operative *Boerenbond* and the Ministry of Agriculture vie with one another in encouraging this department of Education.

Female training for farm management and country life are likewise paid marked attention to in France, where one of the latest institutions busy with it is that named after Jeanne d'Arc, occupying the Château d'Epluches, near Pontoise. It was formed under the auspices of the influential *Société des Agriculteurs de France*. This institution, however—like its sister institutions at Kerliven, Coetlogon and elsewhere—is a regular college, with a curriculum of two years, whereas in Belgium the method of teaching employed is rather that of periodical gatherings, advisedly fixed at rather long intervals, so as not to interfere with work at home. They are intended simply as "gathe-ings." Expense cannot under such circumstances create any difficulty, for it is trifling. At Berlaer, for instance, the subscription is 50 centimes (5d.), which covers a family as well as a single person.

Instruction of women for rural purposes has spread even into Russian Poland, where there is, since 1907, a *Ziemianki*, numbering about 1,200 members, organised in seventy-six "circles," so as to cover the entire "kingdom" (of 1815), although the head management is at Warsaw.

The most methodical organisation is, as usual, to be

met with in Germany, the *Haushaltungsschulen* (Housewifery schools) of which—such as also render very useful services in Switzerland—have repeatedly been held up as models for imitation. There is, however, instruction provided for all social grades, from the landed proprietor's daughter down to the cottier's, and in occasional gatherings as well as at schools and colleges. The movement has gained a good foothold, more especially in Southern Germany. The *Wirthschaftliche Frauenschulen auf dem Lande* are designed as veritable "High Schools" for women, after preparatory training elsewhere. On the other hand, there are *Wanderkurse*, coming daily into greater vogue, which are courses of lectures delivered by itinerant lecturers, who carry all the necessary paraphernalia for demonstration about with them from village to village, like the *cattedre ambulanti* and the late Sir Th. Dyke Acland's "Model Dairy." These "courses" are maintained by Associations. In Gladbach there is also a society addressing itself specifically to the instruction of women of the working class: *Arbeiterwohl*. In Prussia special attention is paid by the Government to the supervision of the training of lecturers and teachers for such institutions. The rural population is everywhere considered to have become the more intelligent, and certainly the more prosperous, for such training.

But, apart from such technical or special instruction, there wants to be also instruction in Co-operation, as a general, all-embracing subject, for the entire movement. For this, likewise, our Co-operative Union has its qualified teachers, its regular courses of lectures, its discussions and its prizes. We want something of the same sort for Agriculture—though of course it need not, and indeed could not, be of the same elaborate kind, calling for so large an expenditure of time. On the other hand, it wants to be more general, more widely distributed among the

great mass of co-operators. Here is something for the unoccupied winter evenings! In Germany such lectures are paid particular attention to. Here is the *scholarum index* of one Union: (1) One hour, History of Co-operation; (2) One hour, Organisation of Societies; (3) Two hours, Credit Societies; (4) Two hours, Purchase and Sale Societies; (5) One hour, Co-operative Societies of other kinds; (6) One hour, Social and Economic Questions. Pupils are not only taught what they ought to do, but also why they ought to do it. The lecturer discusses the rules with them and explains their several objects; and so the pupils are prepared in general to act not only as efficient officers or committee-men, but also in their turn as good lecturers and organisers. How far away are we still from this! And yet we want something of the same sort among our agricultural would-be co-operators. And, although Schools and County Council Committees can do something to disseminate knowledge on the subject, the proper teachers indicated by the very subject itself are practical co-operators. They possess the advantage of being in constant touch with those whom they are appointed to enlighten, bone of their bone, flesh of their flesh. Their teaching is not schoolmastering. It is rather the teaching of a friend or a relative. Without proper grounding in the principles of Co-operation co-operators are only too apt to strain the practice of Co-operation to serve other purposes—as appears from the late G. J. Holyoake's frequent lament that there are "so many more members of co-operative societies than there are genuine co-operators." Dividend-hunting, over-centralisation, introduction of politics, or agrarianism, and whatever other abuses there may be, endangering both the good repute and the success of Co-operation, spring from the fact that co-operative principles have not been sufficiently mastered.

However, co-operative societies cannot stand still in

their educational action at what concerns their own particular cause only. Their cause is their cause because it is to serve for the improvement of Agriculture and the greater welfare of those engaged in it. Even among the most highly trained nations agricultural knowledge, with the necessary modicum of chemistry, botany, and so on, is found to call for very systematic teaching. The Danes with their admirable High Schools provide for it. The Italians further Agriculture by their useful *cattedre ambulanti*—itinerant teachers with their apparatus—which are in a manner a co-operative institution and certainly lead up to Co-operation. Agricultural co-operative societies cannot neglect this kind of teaching.

As to means for educating action at their disposal, they have plenty, without any reason for fear of their coming into collision or undue competition with the educational authorities of the land, or with the Board of Agriculture—whose successful efforts to impart instruction through its *Journal* and through useful leaflets deserve grateful recognition. Co-operative organisations have the same means open to them in a different way, more as a “family” matter, to apply a French term: *familial*—appealing, it may be, to a more limited class, but appealing to such far more forcibly, through personal interest felt. We could not yet hope to rival the Germans—except in the “get-up”—in the diffusion of knowledge by special newspapers—because we have not yet nearly as large a circle of readers to minister to, or societies to rely upon to contribute to the expense. But we shall do well to observe that those papers there exercise a very powerful influence. The same thing may be said of what is being done in France, in Italy, Switzerland, Austria, and other countries besides. In the Raiffeisen Union there are two distinct newspaper services, both of which are highly effective—the one for the Union generally, and the other for pro-

vincial sections, the *Raiffeisenbote*, issued independently by the Sectional Committees, and dealing with local as well as with general subjects in a thoroughly popular way, which is a main point. The effect is very perceptible. Besides this there are leaflets, such as the Irish Agricultural Organisation Society has issued in fairly considerable number and of excellent quality. Such coloured diagrams as have already been spoken of would make most useful companions to leaflets. A coloured diagram under the circumstances often teaches far more effectively, impressing the knowledge imparted more readily and also more lastingly upon the mind, than letterpress. And of course there are lectures and classes, meetings and discussions, explanations of practical experiments, and the like.

In the German Imperial Union there are furthermore regular "Winterschools" and regular series of lectures, with examinations following—and distinctions for merit.

And, lastly, cannot we turn our General Meetings, alike of Unions, of Sections and of societies, to better account as mediums for the improvement of our knowledge? Abroad they take the shape of regular Congresses. In the place of the hackneyed cut and dried addresses delivered in England by the same familiar speakers and applauded by an audience of "subscribers" rather than agriculturists, abroad these gatherings assume the form of Parliaments, in which points of interest to Agriculture are freely discussed in a thoroughly practical spirit by practical men.

The resolutions passed at such gatherings constitute in Germany, in France, in Austria, in Italy, in Switzerland, the accepted canons of local Co-operation. Why, have not we got anything of the kind? Foreign Agricultural Co-operative Unions could not do without it. Nor should the *cattedre ambulanti* be omitted, supplemented as they may be by repetitions of "Demonstration Trains."

* We may choose our own methods, according to the circumstances of each case. The great point is that Education as such, Education as a main item, Education in Co-operation, in the mechanical services entering into its practice, and Education in Agricultural Craftlore and—following the example of some foreign nations—in matters of the Household and of Women's work in Agriculture—as in the Belgian *Cercles des Fermières*—should be placed prominently on the programmes of Co-operation, in the very forefront. For no Co-operation can flourish without Education.

XVI.—“FORCED” CO-OPERATION.

Co-operation being the thing that it is, it is not surprising that both Governments and kindly disposed individuals with long purses should have conceived a desire to further and extend it as a benefit to mankind, and reflected what steps might be taken for accomplishing such end. Self-help, so it has been found, builds up very solidly and securely, but in the earliest stages with disappointing tardiness. What appears to call for remark is that all such paternal solicitude, of which there is plenty, has remained thus far restricted almost entirely to the *agricultural* application of Co-operation. Only where, as in Germany and in Austria, dread of the “red peril” has made Governments solicitous also for the welfare of what are there termed “the middle classes,” that is, the small handicraftsmen and tradesmen, who are supposed to be threatened with extinction between the upper millstone of monster businesses and the nether one of rising ochlocracy—which latter, of course, deals at Co-operative Stores, have Governments been moved to exhibit an interest also in industrial callings, admonishing those enrolled in them to practise Co-operation in their turn, with Government assistance, in self defence.

There is no denying that pure self-help's building is at first only slow. But it lays a foundation which may be depended upon in all circumstances and, once a certain stage is reached, it develops, as no other force can—as witness the advance by veritable leaps and bounds of our Co-operative Union. No “forcing” will ever equal that. And developing, it produces results not purely material—

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although these are in truth gigantic—but moral and educational as well, such as no other power has yet been able to bring forth. Therefore, perhaps, after all the balance of advantage remains with self-help. There is no State aid, for instance, that could possibly have produced the wealth, the business, the industry and *verve*, the educating and elevating potency of the societies composing our Co-operative Union; none which could have raised common enterprise to the magnificent height of the Schulze Delitzsch co-operative credit societies or the Italian *banche popolari*. The thing is utterly inconceivable. And if you will take the trouble to inquire of any representative co-operator of any of these self-help organisations whether State aid or Patronage could have yielded similar results, they will promptly reply that they could not, simply because in giving their assistance these two agencies infallibly spoil the main material for success, which is the Co-operator himself. They impart an entirely false direction to the movement and so denaturate it. The ringing, shining golden trappings with which successful Co-operation is decked are but accidents or results. It is the self-relying man, led—and it may be, compelled by necessity—to put forth the best efforts, both of hand and of mind, of which he is capable, who makes sound and successful Co-operation. Take that element away, and what you raise up, plentiful though it may be, will prove nothing but “Jerry” Co-operation, ephemeral, Brummagem, with no lasting good in it.

To test the point, compare the success of the purely self-help co-operative unions already mentioned—our own Co-operative Union, the Schulze Delitzsch societies, and the Italian *banche popolari*—with the movements stimulated by State aid or Patronage. The difference in the result is striking. There are societies, there are members, there is some material good. But the spirit,

which is everything, is wanting. And reckon up the perfect "National Budgets" which have been lavished upon these societies, and you will find that even the material return is disappointing. Bred up in reliance upon others the people so bred seem to have lost all capacity for relying upon themselves; they lack the backbone, the nerve, the fibre of the others. The assistance given was designed to help them over the infant stage of the first rough ground. However

"Ce que le poulain prend en dompture
Il le maintient tant qu'il dure."

You cannot, as Mr. Chamberlain has put it, "teach old dogs new tricks." To raise up a British oak that will make a seaworthy ship, you want to plant it of the right sort, on exposed ground, where it will have to battle with the winds and draw up its nourishment from the sub-soil with its long roots laboriously sent out in every direction in search of it, and so acquire toughness and hardness. Plant an American oak in a carefully sheltered position, and you will have a tree shooting up almost like a "Jonah's gourd"; but its timber will waste and break almost like matchwood.

As a telling instance of the failure of "forcing," look at the recent collapse of so many "Catholic" Village Banks in Italy! In 1907 there were in Italy 1,526 *casse rurali*—the overwhelming majority being "Catholic," because the support of the village priest is as a matter of course sought for when a society is being formed, and the priest stands under the bishop. In 1911, there were only 1,140. Those collapsed were almost entirely "Catholic." And necessarily so. Because neutral *casse* are well looked after by men who understand village banking. They may be small, poor, weak in funds. But they are under business management and properly controlled. The "Catholic" banks are under the Bishop, grouped in diocesan Unions,

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and their main object is to promote "Catholicism." There have been some disgraceful frauds and embezzlements, such as, it appears, the formal placing of the institutions under the guardianship of patron saints has proved powerless to avert. Absconding priest-managers were not in every instance "ecclesiastically" bad. On the contrary, one, at any rate, who dared no longer show his face in his parish after employing the money of depositors in setting up a handsome rectory for himself—has been rewarded by promotion in Rome. However, they have made a decided mull of bank management. Except for Church "forcing" such management would not have been committed to them. It was John Bunyan's friend 'Mr. By-ends' who, promoting, at the same time also spoilt "Co-operation."

There is, no doubt, assistance which authorities and well-wishers may legitimately give, with good effect, to stimulate Co-operation. Unfortunately, our actual well-wishers, never rising above Mr. Sangsby's modest conception of helpfulness, think of assistance only in "half-crowns." Now money is an excellent servant, but a wretchedly bad master. Mr. Gladstone, among the many good rules that he has laid down for the world, spoke out in full frankness—and never more truly—on this point when the Industrial and Provident Societies Act—which is our "Co-operative Act"—was before the House of Commons. Encourage Co-operation, so in effect he said, grant to it exemption from fees, stamps and taxes; but do not give it money!

Nevertheless it is just money or money's worth—such as, abroad, the purchase of co-operatively raised produce, at preferential prices, for the public service—that authorities of the present day—even Mr. Gladstone's own successors in office—persist in desiring to force upon Co-operation—coupled, it is true, with welcome and legiti-

mate exemptions from some taxes and fees, but also with something of quite a different character, which is anything but "encouraging." We shall have to return to that. But let us deal first with purely money help!

Such coddling assistance has, as observed, nowhere produced any real good. It has conjured up "Potemkin villages"—the work of an imaginative brush upon patient canvas, with which a sovereign's eye might be tricked, but which stand for no production and no wealth. "Leantos," ever dependent upon the wall against which they are set up, parasites nourished upon taxpayers' money, creepers with neither stem nor root to support them, they remain, vegetating, providing a little welcome shelter, it is true, for a time, and some little material fruit, but never growing into self-sufficing plants, never adding to the real permanent wealth of their country, never nerving the men dependent upon them for protection to greater strength. You cannot get over the principle of Nature that good results have to be worked for. *Ardua quae pulchra.*

It is bound to impress one as just a little odd, by the way, that our Government—which now ranks among the best State-aiders going—should have chosen just the present moment for putting its new idea into practice. Odd—because on the one hand, we have the most brilliant proof of the sufficiency of pure Self-help that has ever been provided continually before our eyes in our "industrial" co-operative movement. What "industrial" working men have accomplished small holders and farmers may assuredly likewise achieve. They are, in truth, much better equipped for this work than were the original Rochdale weavers. The year 1870 has gone by, bringing with it universal Education. They have an instructive example placed before them, which the weavers had not. Their path is therefore marked out for them beforehand. And odd, once more—because State-aided Co-operation is at

the moment openly discredited. It is just at the present time that foreign co-operators, reared up on State aid, are deliberately throwing off its embarrassing golden shackles, because they find them too heavy to bear. The first sweetness in the mouth has given place to very trying bitterness in the stomach.

The explanation probably is that our Board of Agriculture is a most warm-hearted supporter of the International Institute of Agriculture, the contributions to whose very instructive and valuable volumes are in the main, if not exclusively, drawn from official sources, and accordingly not unnaturally make a little broad the phylacteries of Government generosity and paint the supposed success in brilliant "rose colour," never stopping to mention the many disappointments of which the readers of unofficial prints in the several countries, and the traveller with unbiassed mind who visits the scenes, are painfully aware. From what is there related one could never tell what costly collapses have taken place, more specifically among Government-supported granaries and vine growers' societies, and how many Government-assisted associations are kept up at the taxpayers' cost, really only for show; nor of the dire troubles that open-handed Governments are experiencing in endeavouring to train the helpless *contadino impreparato* to what is intended to pass muster as "Co-operation"; nor of the perverse refractoriness with which the French Government-assisted agriculturist refuses to accumulate reserve funds in his credit societies or to commit himself to serious liability, to effect both which objects the State help given was avowedly granted.

And of course they tell nothing of that open revolt against Government assistance now going on in at least two countries, in which such assistance has been put to the test.

In Germany Agricultural Co-operation is up in arms against the State-endowed Bank, which was specially created, with a very large capital—£3,750,000 of tax-payers' money—to "finance" it, lending its aid in the shape of advances under market rate. That lastnamed promise has been kept, as the chief of the great Raiffeisen Union recently pointed out in Parliament, only "in a Pickwickian sense." "We have had to pay $7\frac{1}{2}$ per cent.!" so he exclaimed. The purely joint stock "Dresdner Bank" now actually gives the said Union precisely the same aid on more liberal terms, as a mere matter of business. In France, where the very liberally granted *Crédit Agricole* is administered in a most enlightened manner by a peculiarly well fitted chief, advancing public money plentifully, absolutely free of interest, a representative speaker, M. de Marcillac, the other day declared at the annual meeting of the *Société des Agriculteurs de France*, amid approving cries from his hearers, that the position into which dependence upon the State had put societies had become intolerable, and that other means must accordingly be found to obtain the money required, on businesslike, but not in their nature restricting terms. The same judgment has since been heartily endorsed by resolutions of great provincial Unions, as for instance by that of the Périgord and the Limonsin.

And in Italy the failure of those very bountiful, but faultily devised schemes for bringing prosperity, through what is by courtesy termed "Co-operation," to the long neglected South—where the peasantry, now the sport of landlords' caprice and greed, stand in need of nothing so much as of fixity of tenure—is the remark of all the public and the disappointment of those who wish the South well. An official report recently issued* practically

*Avv. Alessandro Baccaglini, La Legislazione Italiana sul Credito Agrario. Ministero di Agricoltura, Industria e Commercio, 1911.

admits that what is there wanted is not coddling from above but co-operative organisation from below, on lines which, in point of fact, exactly correspond to those adopted in the Raiffeisen societies. It is the men who are first wanted, not the money.

It is a false conception of Co-operation altogether to judge of it purely by the money standard, and to want to promote it by providing cash, which in truth is a very dangerous article to hold, before there is business to require it, since it powerfully tempts to improvident employment, for employment's sake, where provident restraint should be the main guiding principle. Money, so one may be thankful to think, is to be got. The late Lord Salisbury in a memorable passage described it as "overflowing in the coffers of the bankers," only waiting for an opportunity of profitable employment. The qualities which go to make a co-operator, and therefore Co-operation, and which of themselves entitle to being trusted with money, are not so easily obtained. Look at India! Its Co-operation is still naturally imperfect in method; but it is sound in spirit. And nowhere in the world has there been so rapid a growth of Co-operation, once it was set on foot. When in 1904 Lord Curzon gave the Royal Assent to the Bill which authorises its practice, he pointedly referred to the complaints that had been made on the score of what was considered the "grudging" money support offered by the Crown. It was not "grudgingness," so Lord Curzon explained, which had prompted the rather narrow limitation of money help, but solicitude for Co-operation, in deference to my opinion pronounced, that much money help must needs mean the spoiling of the quality of the Co-operation to be created, instead of improving it. Results have amply justified Lord Curzon's apparent chariness. Money has come forth abundantly—even in provinces the Registrars of which had protested

to me that deposits were there wholly out of the question. They have come in all the same. Rayats have found a few spare annas to deposit. Native well-wishers have given more substantial support. Some of that hidden treasure, the unfruitful concealment of which is made a subject of chronic complaint, has come out of its hiding places. Co-operative banks have learnt how to strengthen their position by combining to the point that Joint Stock Banks gladly open cash credits to them. In at least two provinces State help has ere now been declared to have become wholly superfluous. And throwing Indians upon their own resources has very naturally brought out their mettle. It has educated them and made them ask for more education, general as well as technical. They want to have better implements, to employ more fertilisers, to be taught to farm better. A Government dole would never have produced such results. You have the proof in the *takkavi*, which afford a little material benefit, but have to be pressed upon an inappreciative peasantry.

There is no greater delusion than that you can promote Co-operation by coddling it with money. It is the effort necessary to obtain money which creates the requisite nerve.

The conspicuous failure of Government assistance in the matter of corn elevators in Germany has already been called attention to, contrasting as it does with after all fair success in cases in which farmers have been left to shift for themselves. The avowal of even more pronounced failure still in Manitoba has come in opportunely to press the lesson home. A well-meaning Government, heedless more *Britannico* of German experience, considered that it would be serving Agriculture by setting up elevators at Government expense for the exportation of corn. However the elevators, pretentious as they were, had to be closed, having accomplished nothing except to waste

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a considerable sum of public money. The Government, so Mr. Roblin, the Prime Minister, has explained, " could not compel the farmers to ship through the Government elevators, and at various points there were no buyers." Farmers *would* go to their own accustomed shipment places, from which they were to be diverted only by action fully of their own.

But it is not merely the enervating effect of patrons' doles which accounts for failure. There are few doles dealt out, more especially by a Government, coupled with which something else is not at the same time given, which "something" is distinctly injurious. Nobody objects to money spent in the right way—as a right way there must be where the object to be attained is one of common benefit. That way will still be shown. But as the money is now given—and proposed to be given in greater abundance in this country—there is something noxious that goes with it. And that is Government influence and Government dictation on a matter on which a Government is by no sort of means a qualified judge, depriving Co-operation of all the freedom of independent initiative and action, such as is indispensable for its success. It is sometimes sought to make a point of the fact that what money is given is expressly *not* given for business purposes, so as to place traders at a disadvantage—as if that purified State assistance from all its mischief! Abroad, so it deserves to be pointed out, people are not everywhere equally squeamish. There is not a little money there given for business purposes. And we have heard of manures, implements and the like being sold in Ireland under cost price—that is, in part at the taxpayers' expense, to the traders' detriment—by the Department of Agriculture. But put that aside as not generally applying among ourselves! Nevertheless once money is given you cannot get away from the immutable fact that, as the late

Dr. Miquel, then Prussian Minister of Finance, expressly explained in Parliament, when dealing with this very point, that "Who pays, governs." It is the man who pays the piper who calls the tune. And in this case he *does* call it. And having a master other than itself is unavoidably destructive of sound Co-operation. For Co-operation is not a thing that men can be put to by pulling a string or drilling them into the performance of some mechanical action, but can be the product only of their own free unrestrained will. They must act for themselves, not suffer themselves to be moved like pawns on a chessboard. Co-operation is by its very nature a republican institution, not a *panem et circenses* benefaction. A Government in fact cannot possibly know what is wanted in Co-operation. No more can, by the way, broad acred squires or wealthy politicians. It is the donkey himself, as the French proverb aptly has it, who knows best where the harness galls him; and he alone can tell what is likely to bring him relief.

There are two kinds of mischief, more particularly, which interference by Government—or by patrons—habitually produces.

In the first place the paying party claims to have its say—and that say is intended to be decisive—in the management of co-operative organisations. That claim is, in the case of the State, supported by the contention that the Government, dealing with public money and being responsible to Parliament for its employment, is in justice entitled to effective safeguards against mis-employment. That is perfectly true. But it does not imply that the Government itself should direct such employment, which makes Co-operation something essentially different from that which it calls itself. In the worst case a right of veto would suffice. But we are not so hard driven as to have to fall back upon that. There

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are plenty of means available for checking the expenditure of what was not given for a Department to expend, but for the benefit of Co-operation. Neither Parliament nor Development Commissioners designed any of the money for the benefit of the Department. All the Government's function in the matter is to see that the money is not misappropriated. That may be done without directing its expenditure. However, the Government nominee sitting at the Committee table necessarily becomes an overlord, whose opinion almost amounts to a command. And that is quite inconsistent with the idea of Co-operation. In Ireland we have been told of the nominees of the Department vetoing propaganda in certain parts of the country. The whole conception of such a state of things is contrariant to Co-operation.

In the second place, where a public Department presumes practically to direct, even only propaganda, we find that people outside are not merely taught what Co-operation is supposed to be and invited to practise it for themselves, but are *urged* to accept it at the Government's hands with—in the case of banks, at any rate—the principles of rules laid down for them. In some foreign countries pressure goes further, and according to the number of "co-operative" societies (mainly banks) formed in a district is the administrative officer's promotion. A Government not unnaturally wants to have something to show for its outlay of Parliamentary money; and it makes number the test. Now whatever you may call whatever results from this, it cannot be Co-operation. It may be compliance with the form of Co-operation. It is not the adoption of its substance. And Co-operation so forced upon people is not likely to last or to bear good fruit. There can be no other foundation for good Co-operation than the members' own conviction that they want it, and their resolution to make it succeed.

There is, as it happens, quite sufficient room for action by private well wishers and authorities in furtherance of Co-operation, if they only choose to occupy it. And nobody will grudge even ample money expended upon such. Its description may be summed up in the word "Education." And Education may under this aspect very well be made to include propaganda, so long as authorities are willing to permit propaganda to take its own free course, watching only as just stewards of the public purse over the employment of public money. Propaganda cannot be judged under the same aspect as business Co-operation, because it cannot in any case be made self-supporting. It necessarily means pure outlay. And where—as has hitherto, unfortunately, been the case in England—public spirit is lacking to supply the means by private donations—which is by far the most desirable way of meeting the cost—one cannot judge authorities harshly for devoting public money to what is, after all, purely instructive and for the public good. But it should stop short of the employment of pressure or dictation.

However, we want instruction of other sorts as well. There are elementary schools, there are continuation schools, there are Agricultural Colleges. Co-operation has now become so important a factor in economic life, so much of a main subject in the prosecution of Agriculture, that one may well ask for it to be assigned a place in the popular school programme. Money bestowed upon the teaching of Co-operation by properly qualified teachers would probably be found well employed. There is no more effective help given to Co-operation in Agriculture in France than by those deserving departmental professors, whose only shortcoming is that they are underpaid. They are now to receive a more dignified title, as "Directors of Agriculture," but without any remedy being applied to the said defect. There is literature

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to be distributed—although the *viva vox* is always more effective, where there is an elementary class to deal with. While Co-operation, whose proper charge it is, is weak, one could scarcely grumble at the Government establishing such analytical stations as prove a boon, say, in the kingdom of Saxony, but also elsewhere, where fertilisers, feeding stuffs and seeds are officially tested under an arrangement in which makers and growers may join, and which assures to the small farmer—who cannot afford for this purpose to join the “Royal” Society—the certainty of obtaining his small quantities of genuine quality. And there are similar outlets for Government beneficence to be found in other directions. Such careful inquiries by competent men as that undertaken in Germany in 1911, by order of the Board of Agriculture, to ascertain exactly what is being done in more advanced countries—or even elsewhere—in the matter of Agricultural Co-operation are decidedly worth encouraging. They are bound to teach more even than the excellent reports in the *Bulletin* of the Institute at Rome.

There is indeed a wide field open for Government action in the direction of collecting information and diffusing knowledge. But at its clearly observable limits its action ought to stop, or it will, like a bad doctor, produce in the patient disease rather than health. Public expenditure under such head is admissible, because the service to be rendered is a public one, for the rendering of which the country as a whole would be the better. But subsidising co-operative business, extorting a pound of flesh, in the shape of dictation, for the pecuniary support given to propaganda, and authoritative influence used to make people form societies who are not prompted to do so by their own free resolution, are cankerous seeds of mischief which cannot do otherwise than corrupt that which they are ostensibly designed to benefit.

XVII.—CONCLUSION.

Brief and incomplete as necessarily is the account here given of the achievements of Co-operation, demonstrating its power and its resources in its application to Agriculture, enough has probably been said to show what a most valuable ally it provides for that calling, still our foremost national "interest"—about the troubles of which we hear so much, that it really seems as if the classical "*rustica gens optima flens*" had become an accepted axiom. We find Co-operation, even in its infant stage, in which only we as yet have it here, cheapening supplies, increasing returns, strengthening human power for work. Everybody who has tried it bears witness to this. Milk, eggs, corn, all fetch better prices; and implements, feeding stuffs and fertilisers are bought with less money. The reckoning up of its benefits should not, however, be restricted to the consideration of gain directly calculable in money. The indirect and mediate effects of Co-operation, its diffusion of knowledge, its remarkable educational capacity, its powerful stimulation of thought, which, among them, teach men to cultivate better, to select the most paying crops for each particular case, to turn their produce to more profitable account, to settle in groups, promoting wellbeing all round, and to make the country the more prosperous and the happier, and its immeasurable value as enabling us at length to make the rural social reform, so long fondly dreamt of, so often attempted, a palpable reality, by producing once more a peasantry, comfortably and permanently settled on the soil, ought certainly not to be left out of account.

There are, as observed, services which Co-operation has it in its power to render, which have not been spoken of. One of these—undoubtedly important to our rural population, though not directly agricultural—deserves at any rate brief mention. There are, as we know, "twelve hours in the day," all of which are not taken up with farm work. There are seasons during which the balance of time not so appropriated preponderates. All such hours need not, surely, be spent in idleness. And there will always be room for more earning. It is for such hours that domestic industries, such as may be taken up and dropped at pleasure, and do not demand absence from home, seem to have been designed, capable of employing idle hands at profitable work—basket making, wood carving, elementary metal work, embroidery, lacemaking, crochet and the like. And it is for Co-operation to promote them, because, as it happens, Co-operation alone has it in its power to check and subdue the hateful abuse of "sweating," which naturally fastens and fattens upon such industries, in which the dealer becomes the master.

There is no denying the utility of these industries. What would Lorraine be without its lacemaking and embroidery—the latter of which, as it happens, yields good pay? And what the Black Forest, Thuringia and the Eifel mountains without their very varied domestic industries, ranging from meerschaum to clocks and wire-work, which supplement Agriculture? The erst barren and deserted Eifel has become civilised to almost as great an extent by the rural industries there introduced, as by the measures taken for the promotion of its Agriculture. However it is difficult to keep out "sweating." Without Co-operation, do Governments and authorities what they will, the peasant or country woman, living in their cottage, far off from the busy world, have no means of disposing of their handiwork, otherwise than by selling it

to a dealer who, making the most of his opportunities, becomes a veritable slave driver. Co-operation brings in the "cash nexus" on its side, substituting itself for the dealer, and "sweating" goes out.

We have plenty of good material for such rural industries in our three kingdoms, and plenty of room for them. The periodical shows of articles of domestic work produced in Ireland, among the very population whose employment we are here contemplating, indicate an undoubted capacity, in the shape of good work, good taste and originality in design. The pity is that thus far the pursuit of such industries has not been carried very far. The Irish Agricultural Organisation Society, with its limited means, could not, any more than John Bright, drive three or four omnibuses abreast through Temple Bar. And where a choice has to be made among subjects, it is the most urgent, naturally, which takes the cake. Now that the "United Irishwomen" have come upon the scene, with their feminine power of influencing and gaining over people, and their patriotic fervour and energy, one may probably hope to see a new leaf turned over in this respect.

It remains to consider what use we in this country are making of Co-operation in its application to Agriculture, and what room there is for its further extension.

Long as we have lagged behind, we have at length made a beginning. The mantle which in the sixties and seventies creditably clothed Vansittart Neale and his fellow workers, who were true co-operators, has fallen upon other shoulders. The world has advanced since then. Light has come instructingly, and guidingly—as in the matter of Christianity by the Bosham Monks—from Ireland, where the admirable work done by Sir Horace Plunkett and his colleagues has, in the words of so high an authority as Sir Horace's own successor in office, created a "new Ireland"—in his amended opinion deserving of the long

desired gift of power to govern itself. Such example could not fail to have its effect, inciting to imitation, upon England and Scotland. My own humble efforts to form a co-operative supply society in East Sussex in 1883 failed. However, in 1899, under the leadership of the late Lord Wenlock, we formed—at the prompting of Mr. W. L. Charleton, one of Sir Horace's pupils—the "British Agricultural Organisation Society," which, upon the collapse of the late Lord Winchelsea's "Union," in 1900, took in the "rump" of that illfated institution, and so became with it the "Agricultural Organisation Society," without any prefix. With the help of a very efficient Secretary, to whose energy and judgment the results thus far obtained are mainly due, we have done pioneer's work which, revealing the presence of decidedly favouring conditions, of plenty of excellent raw material for Agricultural Co-operation, and a ready disposition to be taught and practise it, unquestionably augurs well for the future, if we will only proceed on the right lines. Such a society as that of the Eastern Counties will bear comparison with any agricultural co-operative society throughout the world. It brings out very clearly our old boasted practical sense which, working with simple means, does not require the elaborate arrangements and laboured construction of some foreign organisations. There are other societies as good. And the spirit shown, say, by our Welsh sections, is full of promise. Our methods for collectively selling live stock are as good as any that have yet been devised. The activity of the National Poultry Organisation Society has placed us, in the matter of technical instruction on the raising of eggs and poultry, at the head of nations. Improved fruit grading and packing have by their success secured converts, whose improved takings may be counted upon to stimulate a zeal in others. And our Co-operative Insurance has made a good beginning.

Indeed, although, to quote the words of a high authority in the Government Department dealing with this very matter, everything that is done here still appears "terribly small" in comparison with what is done abroad, all round the field appears "white unto harvest," calling for labourers to put their sickle into the corn. In our attempts to garner in that harvest—or, more correctly speaking, to prepare the ground for its growth—we have in the main—with sundry aberrations, which there is no denying might have been avoided—gone to work upon the right lines. Only in the promotion of agricultural credit societies have there been,—in England, unlike what has happened in Ireland—some rather serious departures from good principle, such as have, to my regret, compelled me to dissociate myself from the work of the society of which nevertheless I am one of the oldest members—work which, in truth, was begun as long as nineteen years ago, by the Agricultural Banks Association, of which likewise, on account of false practice pursued, I could remain a member only for less than a year. There is a prospect now happily of that long continued mistake being set right. At any rate the two most vicious rules, to which, after repeated private warnings, I felt bound to take exception publicly in "Co-operative Banking," have now been—unfortunately only provisionally—altered.

It is perfectly intelligible how on new ground, and among people not practically familiar with the subject—however full of good zeal they might be—even very essential principles should fail to be at once understood. For Co-operative Banking undoubtedly is a thing *per se*. However, in the absence of knowledge of one's own it is generally held to be not a bad policy to follow the beaten track of established experience. And certainly it cannot be right to dub credit societies of a quite new type "Raiffeisen societies," which the successors of Raiffeisen would repudiate at first glance.

The principal aberration made of course is the discarding of safeguards which sixty years' experience has shown to be absolutely indispensable, in the interest of security, and to which "Raiffeisen" co-operators attach the greatest value. It is of no use ignoring those dangers like a hopeful boy who, seeing only the smooth water and the azure sky, does not hesitate to float his holiday boat for a sail across the sea. The very small amount of irksomeness which precautions involve will be richly repaid by the safety thereby purchased. Very opportunely has evidence been given before the Departmental Committee on Agricultural Credit in Ireland, which is so much to the point and so richly instructive, that one would wish to see it placed in the hands of every one who busies himself with the organisation or the supervision of agricultural banks. And such people should be *made to read it*. It does not in the least justify the recklessly sweeping accusations levelled by the witness against existing banks, nor the fierce hostility exhibited to the Irish Agricultural Organisation Society. So far as the evil extends, the Irish Agricultural Organisation Society is wholly innocent of it. Similar things have occurred in other movements and are bound to occur, so far as the proper precautions (the adoption of which I have in vain tried for twenty years to urge upon optimist promoters of such societies) are not observed. And so far as the evil goes, it is not yet serious and can easily be rectified. But, however much the mischief actually done may have been exaggerated, there can be no doubt that, owing to want of control, inspection and holding committees in check, there has been careless management, which as a matter of course—even though it has not been aggravated by that fraud and embezzlement which are certain to follow, should carelessness be persisted in, nor by the adoption of that vicious principle of unequal rights for rich and poor—the wealthy becoming

the rulers, with strictly limited liability, whereas the poor beneficiaries, ruled over, are to bear the burden of unlimited liability—has led to loss. It will be a valuable help to the course of Co-operative Banking if Mr. T. W. Russell's evidence, given before the Departmental Committee, is widely circulated and taken to heart. For, great blessing that a soundly formed and carefully managed co-operative bank is bound to become to its district, just as serious a danger must be a bank improperly handled. And those who try to persuade people to become members of banks formed on altogether novel lines, approved by no one except their own authors, would do well to bear in mind what a serious responsibility they take upon themselves in inducing others to stake their unlimited liability upon such an untried system. The remedies suggested by Mr. Russell, to wit Government inspection and banker's audit, are wholly beside the mark. And we do not want them. The Registrar of Friendly Societies is there to compel an audit. And we have much more trustworthy inspection of our own than any Government Department could provide. But the giving of Mr. Russell's evidence, pointing out the dangers to be faced—never dreamt of by English or Irish organisers—is a real service to the cause of Co-operative Banking. Avoidance of such danger is, of course, not all that has to be studied. There must be proper organisation, giving to every one his rights, not allowing the wealthy man—who, in the bargain, is to rule the bank—to slip out with his limited guarantee and casual attendances, whereas the poor man is to stake his all, attend regularly on pain of dismissal, and submit to being governed. If there is a wealthy man desirous of helping, but unable to do so with personal service and unwilling to pledge his liability, he had much better content himself with paying in a deposit or giving a guarantee, to which, as being a matter of contract, he

may attach what conditions he pleases. We cannot have two orders of members, or else patronage, in a bank.

There is reason, fortunately, to hope that bank promotion will in future be proceeded with on lines such as experts will be able to approve.

But right as, generally speaking, our forms of concretely applying Co-operation are, there is danger none the less of our missing the aim that we are making for by what is evidently a misconception of the co-operative principle. We began—almost necessarily—as an oligarchical body; and an oligarchical body we have remained long after the movement had developed to proportions such as plainly call for a very different form of organisation. We have settled things *brevi manu* in London, according to our own pleasure. Our constituents have not been consulted—except *after* the event—even upon so vital a question as that of our taking the Government's money and becoming more or less its servant, in the very unco-operative form of a Joint Stock Company. That form was readily accepted by our negotiator, in his own words, as a matter of "Hobson's choice." The Irish, being of better grit, resisted and easily carried the retention of their old co-operative form of organisation. Had our negotiator fully understood the co-operative principle, we might have done the same and so escaped critical reflections in co-operative quarters. Co-operation, so every co-operator knows, is of its very essence a republican institution, that wants to be governed by its own members, as a matter of constitutional principle. Nobody else, be he ever so benevolent, can possibly determine for them what they want and how that which they want is to be provided. We have in truth, when following in its wake, adopted the *methods* of the successful Irish Agricultural Organisation Society, but not its *spirit*. The effect is

at once visible if we compare a general meeting of the Irish Society with one of our own. In Ireland all is life, interest, activity—because the meeting is a representative gathering, a veritable co-operative Parliament, of which the beneficiaries are full members, and which accordingly means benefit to the movement. Everybody takes an interest in things. Questions are freely discussed from all points of view. There is no “patronage” about the thing. The same remark applies to the entire movement and, among other things, to the *Irish Homestead*, the Society’s paper, which is full of letters from readers, which are to the point and show that Co-operation is uppermost in all members’ minds. And when it comes to such a question as resisting a “Department,” which in virtue of its official prerogative presumes to try to replace the Society and its work and substitute for its sound co-operative methods the nondescript caricature of “non-controversial” Co-operation—which is to exclude buying and selling, that is, the two mainstays of Co-operation—all stand up as one man for their Society. And surely if there can be one man more entitled than any other to prerogative privileges in the matter of directing the Society, it is Sir Horace Plunkett, the creator of the Irish movement. But to exercise such privileges would be to deco-operatise Co-operation. At our English General Meetings, we have in the main, non-beneficiary subscribers. There is talk; there is a cut and dried programme; there are complimentary resolutions. But everything done is formal. There is no life in it. The Meeting is not a Parliament.

What wonder that farmers hold back! English farmers do not want to be ruled over. Like British Colonies, in Mr. Borden’s phrase, they are not prepared to “constitute themselves wards of self-appointed guardians.” In such indisposition they may be entirely wrong; but they

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hold—that they know more about practical farming questions and their own wants than the most philanthropic patrons that can be met with. What wonder that small holders in their societies complain that the governing society is conducted by “gentlemen” who know little or nothing about small holders’ wants! What wonder that co-operators—well meaning co-operators, thoroughly friendly to our movement—tauntingly twit me in this wise: yes, you want us to buy your produce—and then you go to the Government to beg for money! I will not here go into the false starts that in our attempts to do for others what they should have done for themselves, we have been led to make. Our movement has long since attained proportions large enough to call imperatively for a democratic organisation, making us a representative Union of Societies, giving to every one his due, governing its action by the wishes of the members generally, and recruiting its rulers and advisers from the ranks of practical agriculturists.

However, just at this point it looks as if things were destined to become worse rather than better. Under the bargain concluded with the Government for the obtaining of money—which is like that concluded between the horse and the man, for the purpose of hunting down the stag; the stag was indeed hunted down but the man remained firmly seated on the horse’s back—the Agricultural Organisation Society becomes practically a department tacked on to the Board of Agriculture. In the whole history of Co-operation such a thing has not been heard of—except in Russia in pre-constitutional days; and there the co-operators have fast enough rebelled. Not the German Government, not the French, not the Austrian, has dealt in this way. And in all conscience they give money enough and interfere enough. But they do not man the Committee or Board. It is all very well

to say: oh, but the Government nominees on the Board—a full half, after the Government has nominated the whole first Board—will be in a minority. The margin, if any, will be very small. And “who pays, governs.”

Apart from the faulty character thus given to the Organisation, the danger herein involved is this, that farmers and small holders are likely to nourish the suspicion—they do so already—that what the Government really desires is to make the Agricultural Organisation Society, subsidised as it is, minister to it specifically for carrying out its Small Holdings policy. Now that policy, although not by any means complete in itself—it wants purchase added to tenancy—no doubt deserves hearty support. But it does not by any means cover the entire ground of “Co-operation in Agriculture.” And it is not overmuch appreciated by farmers—that is, by a very large class of those very men for whom Co-operation is intended. Thus the Agricultural Organisation Society runs a serious danger of giving up to Government what was meant for Agriculture, and in doing so of estranging the very men to act for whose benefit it set out.

Once more, one may hope that the mistake committed will be corrected before it has proceeded too far. Government and the movement should undoubtedly be made to work in unison and to help each other. But we may give to the Government the things that are the Government's and yet keep for Co-operation the things that are Co-operation's. Government money may be purchased too dearly. Co-operation, whether in Agriculture or in anything else, can only succeed on republican, representative lines. You want *every* one concerned to join; you want *every* one who joins to take an active part; you want life in *every* fibre, help from *every* hand and *every* brain. That can be brought about only, by everyone being given his

own full say. People do well and thoroughly only what they do of their own free will. Being asked to do what others direct palsies the arm and lames the intellect. It is too late for us to take up the cast off continental principle of the "limited understanding of the governed." Co-operation is a "soldiers' battle" and should be conducted by those who are arrayed to win Victory for it.

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